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The Identification of Successes and Barriers in Establishing Professional Learning Communities From Principals' Perspectives

Katie Carol Clarke

Minnesota State University - Mankato

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The Identification of Successes and Barriers in Establishing Professional Learning Communities
from Principals' Perspectives.

By
Katie C. Clarke

This Dissertation is Submitted in Partial Fulfillment
of the Requirements for
the Educational Doctorate Degree
in Educational Leadership

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Examining Committee:

Dr. Candace F. Raskin, Advisor

Dr. Kathleen Foord, Committee Member

Dr. Jerry Robicheau, Committee Member

Abstract

The purpose of this mixed-methods study was to identify the successes and challenges in establishing professional learning communities (PLC) within 25 school districts in southwest Minnesota. Data was generated by school principals completing a closed-ended online survey that revealed degrees of implementation of PLCs. Survey data was analyzed using descriptive statistics and provided a foundation for the development of semi-structured focus group questions. This was a sequential mixed methods study, as the quantitative data was first collected followed by obtaining qualitative focus group data. Themes were generated during data analysis of the focus group questions and findings revealed successes and challenges of establishing PLCs. The results informed school leaders, stakeholders, and researchers regarding successes and challenges of implementing PLCs, which will provide guidance to districts establishing them in the future.

Keywords: professional learning, collaboration, vision, establishing professional learning communities.

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Chapter 1

Education Legislation

Today's education system is a reflection of transformations precipitated by federal legislation and reports over the last 50 years. The Elementary and Secondary Education Act (ESEA) of 1965, the 1983 *A Nation at Risk* report, and the No Child Left Behind Act (NCLB) of 2001, were among the legislation and reports that spawned reform efforts and played a role in the transformation of today's educational system. Overall, each attempted to create equal access to education and increase accountability measures. The subsequent section will discuss each in more detail.

Until 1965, the federal role in education was limited. The U.S. Constitution does not contain the words "education" or "school;" therefore, historically, educational responsibility resided at the state and local level. The federal government role increased in 1965 with passage of the ESEA as part of President Lyndon B. Johnson's Great Society Program (McGuinn, 2006). The act provided federal aid targeted specifically at districts with large number of poor children, primarily in urban areas (NCLB, 2001).

A Nation at Risk was a report released by the National Commission on Excellence in Education (NCEE) in 1983. It challenged the American education system to do better and keep pace with foreign educational institutions (NCEE, 1983). The report claimed the nation was at risk of being out-performed by counterpart countries and that mediocrity had become a norm in American education (NCEE, 1983). Schools throughout the country responded by lengthening school days and increasing the number of science and math credits required (Goldberg & Harvey, 1983). Ultimately, this report primed the country to undergo several reform movements over the next several decades.

Reform Movements

The excellence movement, initiated in the mid-1980s, focused on increasing standards for classroom teachers and students (Hunt, 2008). It promoted the engagement of school administrators in more leadership activities, a focal point of *A Nation at Risk* report (NCEE, 1983). Increased graduation requirements, longer school days, and enhanced teacher certification requirements were results of the excellence movement (Hunt, 2008). Transformations inceptioned during this movement continued to occur, and remnants are still observable in the educational system today.

The late 1980s witnessed the inception of the restructuring movement which included change in school governing structures including instructional methodology, administrative management, and allocation of resources (Papagiannis, 1992). Further, the movement encouraged and promoted organization by educators and their professional associations (Hunt, 2008). The restructuring movement propagated leaders to give up some control as traditional institutional heads and increase collaboration among staff, creating a more lateral organizational structure (Hunt, 2008). Increased lateral structures allowed teacher empowerment and were a primer for additional accountability, setting the state for the standards movement.

The standards movement, which occurred at the end of the 1980s and early 1990s attempted to address deficits from earlier movements. During this time, states established content and performance standards that provided all students with common goals and outcomes. In turn, local school districts were given flexibility regarding how to design and deliver instruction to meet the state standards (Smith & O'Day, 1991). With unique standards developed by states, it was difficult to measure common achievement and accountability outcomes (Shepard, 2002).

By the late 1990s, schools worked to address state mandated standards, but were not held accountable for student achievement at the federal level. George W. Bush, elected as president in 2000, began an immediate focus on increasing accountability in schools at the federal level. Legislation passed in 2001 became the teeth that would attempt enforcing what the earlier movements tried to do without a legislative stronghold behind them.

No Child Left Behind

No Child Left Behind (NCLB) was passed in 2001 under the Bush administration. NCLB was intended to ensure that “all children have a fair, equal, and significant opportunity to obtain a high quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments” (NCLB, 2001, p. 1). NCLB measured student proficiency through standardized exams in Grades 3-8 and high school. It rated schools on annual yearly progress (AYP), which was based on student exam scores. Additionally, it provides expectations for what constituted highly qualified teachers.

NCLB enacted disciplinary measures for schools not meeting its expectations. Schools that did not have students passing the exams were labeled as failing schools and were required to implement improvement plans. Families with children attending failing schools were given the opportunity to enroll their student in a school that was not failing (NCLB, 2001). Furthermore, schools not making AYP, as measured by proficiency levels on assessments over 3 years, could have administrators and teachers dismissed.

Challenges. In an attempt to create a fair and equitable educational system under NCLB, the legislation created a number of challenges that were criticized among researchers. Sandy Kress, George W. Bush’s top education adviser, acknowledged, “What makes this tough is designing something that will work in 50 very different states, and then figuring out how you can

leverage change when you're only paying 7% of the bill" (Broder, 2001, p. 7). An individualistic, unfunded design, yielded disapproval among researchers who argued the state accountability systems would "produce inflated results; widespread cheating to meet annual targets; a curriculum with less time for history, science, and the arts; teaching to the test; and meager academic gains on the National Assessment of Educational Progress" (Ravitch, 2011, p. 5).

The lack of agreement regarding teachers' influence on testing led some to criticizing the law. Critics contended they "have little to do with what teachers actually do in the classroom or how much learning takes place," (Johnson, 2006, p. 34). President Bush claimed these accountability measures were the cornerstone of NCLB (Manna, 2006). These assessment measures continue to be the most debated segment of the law today.

Professional Development. Accountability mandates required under NCLB directly affected how schools approached professional development. Because of the accountability emphasis on math and reading, some schools focused or even limited their staff development to these areas. One study (Hunt, 2008) showed that districts that failed to make AYP for two or more consecutive years had staff development initiatives primarily restricted to language arts and mathematics. Researchers concur that when low-performing schools improve, it is often the work of the principal and staff through professional development, strong curriculum, and access to resources that is responsible for the improvement results (Darling-Hammond, 2006; Ravitch, 2011).

One factor contributing to a widespread perception that public schools have failed exists because they are unable to meet the demand required by legislation for 100% proficiency. Since 2003, several state waivers have been accepted, which gave states broader flexibility to

implement the law. This federally enforced legislation had created rifts between schools and their state agencies. NCLB left states and schools to figure out how to succeed and comply. It has ultimately gave rise to a revitalized focus on standards, brought new meaning to assessments, and increased accountability measures, providing impetus for continued shifts in professional development.

NCLB Impact in Rural Minnesota

The accountability depicted in NCLB impacted both large urban settings and small rural areas. Due to smaller revenue pools, decreasing enrollment, and geographic distances, pockets of schools sought connections to pool resources and level the playing field between their large urban counterparts in meeting federal legislative requirements. For example, in rural Minnesota, during the 2007-2008 school years, 15 out of 25 Southwest Minnesota Schools were not making AYP as defined under No Child Left Behind (Southwestern Service Cooperative, 2011). There were four districts not proficient in reading, four not proficient in math, and seven not proficient in reading or math (Southwestern Service Cooperative, 2011). These schools served 16,153 students and employed 1,380 licensed staff members (Minnesota Department of Education Report Card, 2008). Under NCLB, schools were able to be closed or re-designed throughout the state if they were unable to continue to make AYP. The imminent ramifications of not making AYP combined with the number of districts in southwest Minnesota that either needs improvement or corrective action status yielded conversation among district leaders on how to collaborate and maximize resources to improve student achievement.

The Initiative

In 2009, administrators from 25 school districts worked collaboratively with the Southwest Service Cooperative and petitioned the Minnesota Commissioner of Education to

implement the *Improving Student Achievement Initiative*. The proposal was composed of six critical elements: programmed days, general staff development, common calendar, professional learning communities, teacher induction program, and post-secondary connections. These components also included rationale for being allowed to begin school earlier than allowed by current legislative statutes. The consortium of schools needed to prove to the commissioner that intentional use of the added instructional time, prior to state testing, would foster increased student achievement. Participating schools districts are listed in Table 1.

Table 1

Improving Student Achievement Initiative Schools (2010-11, 2011-12, 2012-13)

District #	District Name	# of Students	# of Staff
0511-01	Adrian	617	46
0513-01	Brewster	141	11
0891-01	Canby	522	47
0581-01	Edgerton	308	32
0402-01	Hendricks	166	13
0671-01	Hills-Beaver creek	328	28
0403-01	Ivanhoe	151	15
2895-01	Jackson County Central	1,128	84
2167-01	Lakeview	572	47
2184-01	Luverne	1,200	99
0415-01	Lynd	126	16
0413-01	Marshall	2,170	175
0635-01	Milroy	35	5
0414-01	Minneota	447	39
0173-01	Mountain Lake	472	48
2897-01	Redwood Area	1,233	102
0516-01	Round Lake	121	11
2902-01	Russell Tyler Ruthton	553	50
0084-01	Sleepy Eye	611	57
0085-01	Springfield	588	47
2904-01	Tracy Area	812	69
2898-01	Westbrook- Walnut Grove	548	49
0177-01	Windom	886	81
0518-01	Worthington	2,271	190
Total		16,153	1,380

Note. MDE School Report Card (all licensed professionals) October 1, 2008.

The request asked the Minnesota Commissioner of Education, as authorized under Minnesota Rule 3500.1000, to grant permission to implement a flexible learning program for the 2010-11, 2011-12, and 2012-13 school years, and included the six elements listed above. The commissioner approved the request on March 12, 2010. To determine the effectiveness of the plan, the six critical elements of *The Improving Student Achievement Initiative* were evaluated by staff, parents, students, and other community stakeholders yearly. The evaluation included an online survey that was analyzed by researchers and Southwest State University in Marshall, Minnesota.

Purpose of the Research

This study examined one of the six critical elements included in the *Student Achievement Initiative* proposal (See Appendix A): Professional Learning Communities (PLCs). A PLC is a process in which educators collaborate through inquiry to increase student achievement (DuFour, DuFour, Many & Eaker, 2010). First established in the business field, the concept has also been applied to education, where school districts across the country have adopted the model (DuFour & Eaker, 1992).

Using a theoretical model that is based on constructivist professional development elements, the purpose of this mixed methods study was to identify successes and challenges in establishing PLCs within 25 school districts in southwest Minnesota. Success was defined by Merriam-Webster (2013) as, “the correct or desired result of an attempt.” Merriam-Webster (2013) defined barrier as a law, rule, problem, etc. that makes something difficult or impossible. The study investigated successes and barriers associated with the definitions listed above.

Schools that participated in the *Student Achievement Initiative* used the DuFour model of PLC principles. DuFour's model includes four process questions that guide educators work through a collaboration approach (DuFour et al., 2010). The essential questions included:

- What are students expected to know and be able to do?
- How do teachers know when students have learned the intended content/skills?
- How do teachers respond when students experience difficulty in learning?
- How do teachers respond when students have already mastered the intended concepts/skills (DuFour et al., 2010).

In particular, this study was undertaken from principals' perspectives. The literature revealed that school leaders' roles were paramount in successful professional development initiatives (Haynes, 1998; Elmore, 2000; Sergiovanni, 2005). This study will investigate these successes and challenges through a survey, focus groups, and review of yearly reports. Specifically, investigated perspectives of 25 school principals in rural Minnesota and the impact PLCs had or have on the achievement of their students.

Research Questions

The overall guiding question of the research was: what are the successes and barriers in establishing professional learning communities (PLC) from principals' perspectives? The subordinate questions were:

1. What challenges are identified in establishing the PLC model within the district?
2. What successes are identified in establishing the PLC model within the district?

Significance of the Research

This research study used a sequential mixed methods approach. An online closed-ended survey generated data, followed by focus groups that used grounded theory methodology for

analysis. The study was advantageous in examining and presenting information about the topic studied; that was, examining successes and barriers of establishing professional learning communities through principals' perspectives. The study provided beneficial information for school districts beginning PLCs as a part of their structure and process of professional development.

Assumptions of the Study

The researcher is made the following assumptions regarding the study:

1. Participants (principals) had basic understanding and knowledge of implementing professional learning communities.
2. Participants (principals) answered the survey questions truthfully.
3. Participants (principals) articulated focus group responses truthfully.
4. School districts created accurate yearly professional learning community reports.
5. Teacher effectiveness related to student achievement.

Limitations

The research demonstrated limitations consistent with grounded theory research. The researcher focused on principals' perspectives, but due to varied school system sizes, principals assumed different roles within their buildings and district. For example, some principals were responsible for professional development of their staff, while others had directors or coordinators who oversaw such work. The researcher utilized protocols that relied on self-reported data. The participants were given the same written directions, but obscurities may have led to varied interpretation of questions thus, differentiated responses.

Delimitations

All school administrators and some teacher leaders throughout the 25 school districts attended the same leadership training and were involved in designing a PLC model within each school district. These administrators and leadership teams included superintendents, principals, assistant principals, community education directors, special education directors, coordinators, and teachers. Because of their unique role in working directly with teachers in their buildings, this study will be limited to only principals who established PLCs in the 25 rural school districts, and who may have provided specific recommendations to principals in other school districts.

Definition of Key Terms

AYP. The acronym for annual yearly progress, which denotes progress made towards academic achievement under the No Child Left Behind legislation (No Child Left Behind, 2001).

Collaboration. For the purpose of this study, collaboration is two or more educators working together to increase student achievement.

Distributive leadership. For the purpose of this study, distributive leadership includes school leaders (principals) providing opportunities for teachers to make decisions and participate in the professional learning community process.

ESEA. The acronym for the Elementary and Secondary Education Act is legislation passed on 1965 by President Linden Johnson which increased funding to low-income schools.

Learning organization. An organization where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspirations are set free, and where people are continually learning how to learn together (Senge, 1990).

No child left behind (NCLB). Federal legislation providing accountability mandates, attempting to ensure all students reach a pre-determined academic proficiency level (No Child Left Behind, 2001).

Professional learning community (PLC). A model of school organizational management marked by (a) a commitment to ensuring student learning, (b) a culture of collaboration, and (c) a focus on student and school results (DuFour, 2004).

Vision. The purpose for existence and the values upon which the organization is founded (Hirsh & Hord, 2008).

Constructivist. Job-embedded professional development that includes collaboration among teachers (Darling-Hammond, 1993; Fullan, 2005).

Organization of the Study

The following chapters will explore the successes and barriers identified through establishing professional learning communities. The literature review in Chapter Two highlights the research studies in professional development, learning communities, and leadership. Chapter Three details the research questions and procedures of the study including the design and methodology. Results of the qualitative, quantitative, and district documents were discussed in Chapter Four. Lastly, Chapter Five highlighted discussion of the findings, as well as implications this study may have on future research and principals' roles in establishing successful professional learning communities.

Summary

This mixed-methods study sought to identify the successes and challenges in establishing PLCs within 25 school districts in southwest Minnesota. In 2011, teachers in each school district began participating in PLCs, either via face-to-face or virtual networks. The sample included

principals from 25 participating school districts. Data collection will include an online survey, focus groups, and review of district reports. Data were triangulated from the surveys, focus group interviews, and yearly reports. All school districts were required to submit completed yearly reports. Findings and recommendations were generated from the data. The results were designed to inform school leaders in districts considering the establishment of PLCs. Early successes and challenges associated with implementation were identified. Additionally, the results could inform *Improving Student Achievement* school districts and could possibly potentially guide the future direction of PLC work within them.

Chapter 2: Review of the Literature

Due to increased accountability measures identified in 2001 under the No Child Left Behind (NCLB) federal legislation, the approach to professional development transformed, precipitated a shift in many schools towards a job-embedded professional development approach in many schools with characteristics similar to what researchers identify as PLCs. Principals' perspectives were critical because the literature revealed leadership was an integral element in effective PLCs (Chance & Segura, 2009; Haynes, 1998; Elmore, 2000; Sergiovanni, 2005). Building principals were paramount in establishing professional development time, fostering positive climates, and establishing trust (Cranston, 2009; Louis, 1992; Sebastian & Allensworth, 2012). If these elements were not firmly in place, PLCs would not have been as successful in impacting students' achievement, as they could be when building principals are highly involved.

This literature review examines paradigm shifts in professional development. The review also identifies common professional development structures, often referred to as PLCs. Finally, the review distilled school leaders' roles and influence on PLCs.

Shifts in Professional Development

A paradigm shift occurred over the last 20 years in teacher professional development due to increased accountability measures (Chance & Segura, 2009; Vescio, Ross, & Adams, 2008), and research studies supporting models of job-embedded professional development (Louis, Marks, & Kruse, 1996; Newmann & Wehlage, 1995). Schools in the late 1980s noted beginnings of flattening organizational structures (Hunt, 2008) and increased engagement of school administrators (A Nation at Risk, 2008). These structural changes were significant because they created a backdrop from which professional development transformed in new ways. The structural changes required teachers to take a more active role in professional development and

also necessitated that principals needed to be more involved as directors of building day-to-day leadership and operations.

The No Child Left Behind (NCLB) legislation, passed in 2001, mandated new accountability measures for schools (Manna, 2007) that included benchmarks for student achievement through mandated assessments (No Child Left Behind, 2001). This legislation provided schools incentives to re-think their professional development practices to the core of what it meant to be a learning organization, due to vulnerability of funding loss and staff dismissals.

Elements embedded today in professional development were identified in the body of research on learning organizations in the 1990s (Darling-Hammond, 1993; Senge, 1990). Senge (1990) defined learning organizations as “organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspirations are set free, and where people are continually learning how to learn together” (p. 1). A prerequisite of prospering learning organizations was individuals having to expand their capacity by learning from the external environment, such as other educators, published resources, or their students (DuFour & Eaker, 1998; Fullan, 1993; Servage, 2008), as greater things could be accomplished in a collective manner (Fullan, 2005). As a result, the delivery and reception of professional development within an organization needed to change from designing and directing the system (often by the principal), to developing capacity within schools, a transformation from an individualistic approach to a constructivist approach (Darling-Hammond, 1993).

Darling-Hammond (1993) identified the constructivist approach as essential, noting collaboration required institutions to invest in their human capital of the educational system. The

inclusion of collaboration, ascertained by Darling-Hammond, is an essential part of today's constructivist professional development methods (Lujan & Day, 2010). Hargreaves (1994) congruently added that new professionalism is shifting from teachers in authority and autonomy toward new relationships with colleagues, students, and parents.

Standards as a constructivist approach. Traditional professional development, an individualistic approach to professional development, focused on results to direct action and schools as bureaucracies that were run by procedures that produce standard products (students) (Darling-Hammond, 1993). In the late 1980s and early 1990s, it was common for principals to lead and teachers to implement, reflecting a top-down approach (Isaacson & Bramburg, 1992).

The National Staff Development Council published the first set of professional development standards in 1995, which was a framework that utilized theorists' ideas on a constructivist approach (National Staff Development Council, 1995). They were revised in 2001 and 2011 and included seven standards: learning communities, leadership, resources, data, learning designs, implementation, and outcomes (Learning Forward, 2011). The purpose of the standards was to "improve educator practice and student results" (Learning Forward, 2011, p. 6). The standards focused attention on educator learning that was interactive, relevant, sustained, and embedded in everyday practice (Learning Forward, 2011).

The professional development standards identified elements of professional development, recognized as best practice by researchers. For example, McLaughlin and Talbert (1993) maintained that teachers reported a shift in professionalism in working with today's students, as one descriptor of a collaborative professional learning community. The standards identified collaboration as a key feature and stated, "Staff development that improves the learning of all students provides educators with the knowledge and skills to collaborate" (National Staff

Development Council, 1995, p. 2). The focus on collaboration within the professional development standards, which were constructed based upon research, were identified as a core element of PLCs and continues to be embedded in PLC models that are in practice today (Erkens & Twadell, 2012; Hirsh & Hord, 2008).

Job-embedded professional development. Job-embedded learning time, which is more likely to transform teaching practice, is supported by studies conducted by Saxe, Gearheart and Nasir (2001) and Supovitz, Mayer, and Kahle (2001). Both studies examined the impact of sustained, on-going professional development. Saxe et al. (2001) compared professional development approaches (traditional workshops, professional community-based activities that offered support to teachers using new curriculum units) (2001), while Supovitz et al. (2001) conducted a longitudinal study.

Saxe's, et al. (2001) and Supovitz's et al. (2001) studies included an intensive everyday training from a period of one to six weeks in the summer with follow-up training ranging from six times to every two weeks for the entire school year. Both studies found on-going "job-embedded" methods of professional development increased teacher content knowledge and transformation of teacher practices in the classroom. These studies supported researchers' findings that teaching practice was more likely to be transformed through intensive, on-going, focused professional development, otherwise referred to as "job-embedded" (Darling-Hammond, 2009; Fullan, 1995; Haynes, 1998; Knapp, 2003; Supovitz, Mayer, & Kahle, 2000).

Impact of NCLB on professional development. Researchers, (Fullan, 1995; Darling-Hammond, 2004; Hord, 2009), along with the National Staff Development Standards, articulated the importance of constructivist, job-embedded approaches to professional development. The impetus that moved job-embedded professional development into practice throughout much of

America came in 2001 with the passage of the federal legislation, NCLB. NCLB's intent was to ensure that "all children have a fair, equal, and significant opportunity to obtain a high quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments" (No Child Left Behind, 2001). NCLB mandated new accountability measures for schools (Manna, 2007), including benchmarks for student achievement through required assessments (No Child Left Behind, 2001).

Staff development paradigms shifted and schools reported that staff development initiatives began to focus solely on math and language arts (Hunt, 2008), as these were the areas in which schools were held accountable by NCLB's assessment measures. A study released by the Center on Education Policy (2006) revealed that 71% of the elementary schools in the study decreased the time devoted to subjects other than language arts and mathematics. Leithwood, Leonard, and Sharrott (1998) published a study that found job-embedded professional development was a factor in fostering learning organizations. While the literature supported job-embedded professional development (Fullan, 1995; Knapp, 2003; Supovitz, Mayer, & Kahle, 2000), NCLB was criticized, arguing that the law focuses only on language arts and mathematics. Due to accountability measures, schools were missing out on essential learning opportunities for students by fixating on professional development for these two content areas only (Seed, 2008). Overall, student achievement would increase through professional development, strong curriculum, and access to resources that includes several content areas, rather than only focusing on the two that that yield accountability provisions (Ravitch, 2011).

Job-embedded professional development resulted from several actions including the national staff development standards, NCLB, and professional development studies that revealed increased student achievement. The professional development standards focused on a

constructivist approach, shifting from teacher-centered to student-centered instruction. NCLB provided the necessary impetus for accountability and thus forced schools to redesign the models for their professional development. Due to these factors, schools responded by shifting to a job-embedded professional development approach and many explored models of professional development known as professional learning communities.

Professional Learning Communities (PLC)

This section provided rationale for heterogeneous terminology coined by researchers that described professional development and embedded professional learning community components. It also examined common characteristics among professional learning communities. Finally, the common characteristics were distilled, comparing and contrasting their features.

Definitions of PLCs. Researchers identified common elements of professional development to improve student learning and described them as professional learning communities (Blankenship & Ruona, 2007; DuFour, 2004; Hord, 2009; Huffman, 2003; Snow-Geronomo, 2004). Some researchers used similar alternatives to this terminology, but incorporated many of the same elements (Fullan, 2006; Hausman & Goldring, 2001; Senge, 1990; Servage, 2009). Servage (2009) argued that the term “professional” could imply certain beliefs or behaviors unconsciously associated with collaborative learning. By including the term “professional,” it limited the capacity by which professional learning communities were intended to bring about true reform; thus, he claimed this type of learning should be called a “learning community” (Servage, 2009). Fullan (2006) suggested that the term “professional development” be called “professional learning,” as the phrase “professional learning community (PLC)” was a buzz word that people would see as a new innovation or fad. Professional development with

similar characteristics of PLCs was referred to as a “professional community” (Hausman & Goldring, 2001).

“A professional community was defined in terms of its boundaries of inclusiveness, level of activity, and culture” (Hausman & Goldring, 2001). DuFour and Eaker (1998) purposefully used the phrase “professional learning community,” citing that “professional” indicated experience in a specialized field because “learning” implied ongoing action, and “community” fostered cooperation and support among teachers working together. Senge (1990) described professional development activities with these elements as “learning organizations” since teachers and students were both learning. While there was discrepancy between researchers regarding the terminology, the models they each described had many of the same components. The next section discussed characteristics associated with job-embedded professional development coined under the phrases described above.

Characteristics of PLCs. Based on varied definitions of PLCs, a number of models were presented by researchers that included similar components of PLCs (Darling-Hammond & McLaughlin, 1995; DuFour et al., 2010; Forgarty & Pete, 2010; Hord, 2003; Kruse, 1995; Murphy & Lick, 2004; Newmann, 1996). Common elements identified among researchers included:

- collaboration (DuFour, 2010; Fogarty & Pete, 2009; Fullan, 1995; Thompson et al., 2004; Richmond & Manokore, 2011)
- shared vision (DuFour, 2010; Hord, 2009; Kruse, 1995; Thompson et al., 2004)
- leadership role (Chance & Segura, 2009; DeFour et al., 2010; Haynes, 1998; Elmore, 2000; Hirsh & Hord, 2008; Sergiovanni, 2005; Wahlstrom & Seashore Louis, 2008)
- collective focus on student learning (DuFour et al., 2010; Kruse, 1995)

Additional elements surfaced among researchers such as data usage (Hord, 2009) and shifts from teaching to learning (DuFour, 2010); however, the four ideas of collaboration, shared vision, leadership, and collective focus on students learning were identified as common themes in the body of research. A study conducted by Hausman and Goldring (2001) revealed that teachers who worked in schools that utilize PLC-type professional development were more committed to their schools than those who did not use this type of professional development. As a result, a higher level of teacher commitment and engagement could be fostered with the inclusion of the four PLC elements.

Collaboration. Collaboration was the most commonly identified constructivist professional learning element among researchers (DuFour, 2010; Fogarty & Pete, 2009; Fullan, 1995; Kruse, 1995; Murphy & Lick, 2005; Newmann, 1996; Thompson et al., 2004). Having an environment where teachers continually collaborate was essential to a learning organization and to achieve intended results (DuFour & Eaker, 1998; Murphy & Lick, 2005). Murphy and Lick's model identified collaboration as essential to achieving intended results of increased student achievement. Fullan (1995) and Fogarty and Pete (2009) agreed, and supplemented this idea by maintaining the importance of remaining results focused through collaborative efforts as essential. By remaining results-focused, teachers could measure the effectiveness of collaboration (DuFour, 2005).

Sustainability was also identified as a key factor in collaboration, since trust needs to be built over time for effective collaboration (DuFour & Eaker, 1998). Each time a new group formed, trust needed to be re-built (Cranston, 2009). Sustained professional development signified fewer school-wide initiatives and more team-based initiatives that embedded coaching

and facilitation as a part of the collaborative effort, and increased opportunities to build trust (Fogarty & Pete, 2009).

Adlai Stevenson High School in Sterling Heights, MI, selected as the most recognized and celebrated school in America, credited collaboration as a key-contributing factor to student success (Sergiovanni, 2004). Sergiovanni identified that a culture of collaboration at Adlai began when teachers interviewed for a position. New teachers met several times with department teams during the summer months to receive support and ideas for teaching specific courses. They also received notes and ideas to improve lessons on a consistent basis from veteran teachers. Adlai Stevenson High School reported that embedding collaborative efforts at the time of hire fostered increased cooperation among and between new and experienced staff (Sergiovanni, 2004).

Shared vision. A shared vision was identified as a vital element in establishing successful PLCs (DuFour, 2010; Hord, 2009; Kruse, 1995; Thompson et al., 2004). This principle drew upon Senge's (1990) work that identified shared vision as one of the core disciplines and compared its function to that of a boat's rudder; keeping the organization on course during times of stress. The vision included the purpose for its existence and the values upon which the organization was founded (Hirsh & Hord, 2008). A shared vision in a learning community can lead to norms of behavior focused on student learning (Hord, 1997). Additionally, the vision needed to be clear, meaningful, and a part of ongoing discussions (Leithwood et al., 1998). "A shared vision was not only imperative for a successful professional learning community; it was necessary for an effective organization" (DuFour & Eaker, 1998, p. 22).

A vision created by administration or the head of an organization did not develop the commitment needed to make substantive changes among its stakeholders (Huffman, 2003). A vision emerged from people within that truly cared about their work and understood how one

collective vision was able to encompass individual visions (Senge, 1990). The creation of a vision should be based on common values and beliefs and developed over time by all stakeholders (Huffman, 2003). The need to involve teachers in creating a vision of what, when, and how teachers should learn (Darling Hammond & McLaughlin, 1995), emulated a constructivist approach in professional development (Lujan & Day, 2010).

Lack of vision could lead to a fragmented professional learning community (Huffman, 2003).

“The lack of a compelling vision for public schools continues to be a major obstacle in any effort to improve schools. Until educators can describe the school they are trying to create, it is impossible to develop policies, procedures, or programs that will help make that ideal a reality...Building a shared vision is the ongoing, never-ending, daily challenge confronting all who hope to create learning communities” (DuFour & Eaker, 1998, p. 64).

Huffman (2003) conducted a study of 18 schools and considered factors that differentiated more mature and successful schools in their ability to develop a vision. She found teachers who had internalized the shared vision, had ongoing conversations about it and designed it to incorporate an academic approach to student growth, were identified as more mature learning communities. Huffman (2003) defined mature schools as, “communities that have purposefully developed a school culture over time based on clear goals, instructional strategies, student achievement, and outcomes” (p. 23). Since a shared vision was a necessary foundational piece to building successful PLCs, other critical elements of successful PLCs, such as collaboration and effective leadership efforts, could be inhibited, due to the lack of vision.

Leadership roles. A principal's leadership was integral to school reform processes and successful professional development activities (Haynes, 1998). By position, principals were central for almost all conditions necessary for successful implementation of PLCs, including building a collaborative culture (Change & Segura, 2009; Hord, 2009).

Principals' influence on a constructivist system for teachers to learn was significant (Thompson et al., 2004). This foundational approach provided impetus for a principal's role to shift from a director to learner (Hirsh & Hord, 2008), which had the potential to empower teachers and build collaborative trust (Chance & Segura, 2009; DuFour & Eaker, 1998). As a result of schools decentralizing decision-making processes, principals had increased opportunities to serve as supportive rather than dictating leaders (Darling-Hammond, 1993).

The principal's role impacted the effectiveness of all aspects of professional learning communities, which included the common themes identified among researchers in this literature review. Effective principals compelled school vision and behavior that clearly sought to advance vision (Sergiovanni, 2005). Leaders should create collaborative cultures, share leadership with others, and be continuous learners (Sergiovanni, 2008).

Collective focus on student learning. A clear and consistent focus on student learning was an essential characteristic identified by researchers (Newmann, 1996). DuFour (2004) articulated four questions that professional learning communities should address in order to focus on student learning. They were:

- What do we want each student to learn?
- How will we know when each student has learned it?
- How will we respond when a student experiences difficulty in learning?
- How will we respond when a student has already learned the material?

Providing collaboration time without additional expectations was enough; teachers needed to focus on discussions that affected students' opportunity to learn (Darling-Hammond & Goodwin, 1993). As a result, shifting from a focus on teaching to a focus on student and educator learning provided additional opportunities for increasing student achievement.

Distributive Leadership and PLCs

Supportive leadership was a critical element in effective professional learning communities (Chance & Segura, 2009; DeFour et al., 2010; Haynes, 1998; Elmore, 2000; Hirsh & Hord, 2008; Sergiovanni, 2005; Wahlstrom & Seashore Louis, 2008). A principal's responsibility included both management and leadership actions, and successful leadership in both areas was essential in PLCs (Kotter, 1990). Critical elements identified in PLCs and successful learning organizations were impacted by the effectiveness of the school principal (Haynes, 1998; Louis, Marks, & Kruse, 1996). The criteria of time, climate, trust, and distributive leadership were common themes identified in the body of research on leadership and PLCs. It was paramount to discuss leaders' roles, as many principals had responsibility for developing a framework for school-wide staff development.

Distributed leadership has arisen from a theoretical consideration of social processes within a school organization (Gronn, 2000; Spillane, Halverson, & Diamond, 2001). It was a leadership behavior that was disseminated among leaders and followers (Scribner, Sawyer, Watson & Myers, 2007; Spillane, 2006). Distributive leadership was associated with principles that influenced effective PLCs such as time, school climate, and trust (DuFour & Eaker, 1998; Louis, 2007; Smylie, 1992). Subsequently, the success of employing distributed leadership

actions affected relationships among and between teachers involved in PLCs (Smylie, M., Mayrowetz, D., Murphy, J., Seashore Louis, K., 2007).

Erkens and Twaddle (2012) identified developing leadership capacity in oneself through relationship building, as an imperative leadership practice in becoming a highly effective leader. Wahlstrom & Louis (2008) recognized individuals who developed and employed distributive leadership methods, including fostering positive relationships, as a factor that contributes to successful teacher instruction. Additionally, distributive leadership activities have been found to reduce teacher isolation and increase commitment to the common good (Pounder, 1999). Positive impacts on followers, through distributive leadership measures, could subsequently have a positive impact on organizational outcomes (Bird, Wang, Watson & Murray, 2009).

Establishing common fundamentals during the structuring process of PLC development was critical (DuFour et al., 2010), and could be enacted using a distributive leadership approach (Elmore, 2000). DuFour (2004) referred to common fundamental establishment as norms. Distributive leadership characteristics intersected the fundamental establishment tasks, as identifying norms and roles within a PLC attempted to build capacity and autonomy within groups and among staff members.

Principals could orchestrate how staff members will be prepared for new leadership roles (Hirsh & Hord, 2008). Creating a team learning environment through distributive leadership allowed individuals to grow more rapidly in a collective learning environment (Senge, 1990). Successful principals planned how they shared guidance and leadership with staff in building professional learning communities (Hirsh & Hord, 2008). A principal who built collaboration and consensus among staff strengthened his/her leadership position because teachers had participated in the constructive change and improvement process (Haynes, 1998).

Structured time. Structured time for staff to collaborate together was essential (DuFour & Eaker, 1998; Louis, 1992) and was influenced by the principal (Hirsh & Hord, 2008; Wahlstrom & Louis, 2008). Common planning meetings, problem-solving sessions, regularly scheduled professional development, and common preparation times were structures conducive to successful professional learning communities (Cranston, 2009; Leithwood et al., 1998). Louise, Marks, and Kruse (1996) stressed the importance of common scheduled planning time versus personal choices and informal collaboration time. This formal structured time set the stage for teachers to establish norms, values, and collaboration (Wahlstrom & Louis, 2008).

DuFour (2010) claimed that another necessary component to successful PLC work was having common time built into the contractual workday for PLC teams to work. Lujan and Day (2009) agreed, depicting that in order for collaboration time to be meaningful, the time must be kept sacred and focused on planning, instruction, and assessment. Principals who ensured a common time for teachers to work together on a weekly basis embedded a necessary element of successful professional learning communities.

School climate attributes. School climate has been studied for decades and has elicited a variation of definitions and attributes among researchers. Hoy et al. (1991) observed school climate as “the enduring quality of the school environment that is experienced by participants, affects their behavior, and is based on their collective perception of behavior in schools” (p. 8). Barth (2006) explained climate as collegiality, experimentation, celebration, expectations, support, involvement in decision-making, and communication. Donaldson (2008) and Kelley et al. (2005) maintained that school climate influenced work performance and affected morale. Cross-sectional, thematic attributes identified by researchers included safety, social environment, violence prevention, physical, collaboration, and teacher learning (Lindahl, 2009; MacNeil &

Maclin, 2005; McCabe & Cohen, 2006; Nader, 2012; Tableman, 2004). These varied definitions gave rise to school climate research in a multitude of domains identified via specific attributes. Research reviewed on school climate for the purpose of this study concentrated on how teacher learning intersects with principal leadership that was affected by school climate.

Climate and relationships. Ultimately, educators overarching goal was to increase student achievement. A positive school climate was a feature that contributed to increased student learning (Roeser, Eccles, & Sameroff, 1998, 2000), which was directly influenced by a school principal (Nader, 2012). A principal's leadership style and level of support was linked to teacher commitment and student learning level (Singh & Billingsley, 1998). Greenleaf (1970) identified leadership characteristics principals acquired to support positive school climate as, assuming a background position with teams and not requiring acknowledgment for every contribution. By principals enacting these leadership features, relationships could be positively fostered and ultimately led to an increase in positive school climate.

Developing school climates that support adult learning was an integral part of increasing student achievement (Guskey, 1999; Roy, 2005). Sebastian and Allensworth (2012) conducted a study investigating which areas of principals' work were most strongly related to classroom instruction and student achievement. The study found that principal leadership was directly associated with quality of instruction and student outcomes through one primary mechanism: school climate. These findings were consistent among researchers highlighting the essential role school climate played in building strong academic programs (Haynes, 1998).

Rhodes (2009) conducted a study that examined school climate and teacher-principal relationships by addressing teacher identified problems/challenges. The study found that when teachers had valuable input into decision making, supported by effective principal

communication, the principal-teacher relationship and perception of school climate increased (Rhodes, 2009). Westman & Etzion (1999) ascertained that the lack of principal support and communication might precipitate job-related stress and burnout for teachers. Halawah (2005) conducted a study that attempted to identify the relationship between effective communication and school climate. The study revealed that positive school climate elements were associated with positive elements of effective communication. Leaders must foster a positive school climate, as it could impact principal-teacher relationships, which was a contributing factor to the effectiveness of PLCs.

Foord and Haar (2008) discussed the importance of the development of structural and relational practices in tandem for successful PLCs. The suggested four reasons for the inclusion of relational practices that included:

- The need for professionals rather than technicians due to the necessity of developing teachers who could “plan and implement rich, developmentally appropriate curriculum in ways that were instructionally responsible to the diverse students in their classrooms” (p. 8).
- The need for teachers to act and learn as adults and not as children, citing the importance of individualized professional development for teachers, in the same manner that teachers are expected to differentiate instruction to meet students’ needs.
- “Positive interdependence with teachers and not dependence on us as a leader” (p. 8).
- “Successful, learning organization not just learning individuals” (p. 10).

This theory supported the idea that the practice would change beliefs (Foord & Haar, 2008), and was contradictory to the idea that commitment and beliefs would change practice (DuFour et al., 2004). Both theories acknowledged that beliefs and practices would change in professional learning communities.

Trust. Trust was a critical factor in distributive leadership (Smylie et al., 2007). The literature revealed a common element in defining trust within school organizations as vulnerability (Kramer, 1999; Mayer, Davis, & Schoorman, 1995). According to Kramer (1999), trust was “perceived vulnerability of risk that is derived from individuals’ uncertainty regarding the motives, intentions, and prospective actions of others on whom they depend” (p 571). Mayer et al. (1995) described trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party performed a particular action important to the trust or, irrespective of the ability to monitor or control that party” (p. 712). Tschannen-Moran and Hoy (2000) noted trust as “the willingness to rely on others and to make oneself vulnerable to others in that reliance.” Understanding trust in schools was critical because studies have found that trust affected the development of distributed leadership among principals (Cosner, 2010; Kochanek, 2005).

Principals were essential in establishing trust among teachers (Bryk & Schenider, 2003). Principals fostered trust among teachers when they consistently modeled expectations. Trust theory and research indicated that a productive workplace was associated with organizations where their employees trusted the leaders. Consequently, trust helped to make “collective action of various sorts more feasible” (Uphoff, 2000, p. 229).

Research has revealed the importance of trust for schools (Bryk, Camburn, & Seashore Louis, 1999; Daley, 2009). Trust provided a basis for collaboration, support, and accountability

(Coleman, 1988). Further, organizations associated with a high level of trust were more able to foster spontaneous sociability (Kramer & Cook, 2004). Social community engagement could increase the “collective well-being and further the attainment of collective goals” (Kramer, 1999, p. 583). Ultimately these interactions were able to foster principals and teachers relationships, which provided ideal conditions for effective professional development to occur.

Studies have examined the effects of trust on leadership, achievement, and relationships. Bryk and Schneider (2003) conducted a study that investigated how trust affected elementary schools’ performance. They found that schools with a high level of trust correlated with academically improving and high achieving schools. Smylie et al. (2007) conducted a study that sought to identify relationships between trust and distributed leadership. Their results depicted that trust affected principals’ abilities to employ a distributed leadership approach, and how they were perceived by teachers. Cunningham and MacGregor (2000) implemented a study that found trust was positively related to “employees’ job satisfaction and attendance and negatively related to employees’ desire to quit” (p. 1580). Research indicated trust has to be built and fostered within an organization, as trust impacted leadership, achievement, and relationships in organizations.

There were several forms of trust that had varied impact depending on the situation. This section focused on trust as a part of the formation of work relationships between a principal and teachers and trust associated with organizations (Kramer, 1999; Lewicki & Bunker, 1996). Kramer (1999) suggested, “Trust between two or more interdependent co-workers thickens or thins as a function of their cumulative interaction” (p. 55). These interactions in the work place were known as knowledge-based trust (Costa, 2003; Jones & George, 1998), and developed through repeated social interactions (Cosner, 2010). Interactions could occur between principals

and teachers or teachers together, and increased in both scenarios when principals utilized a distributive leadership approach and acted in a supportive manner (Bird et al., 2009). Trust was a prerequisite to collaboration, collective inquiry, and increasing student achievement.

Student Achievement

The impact of PLCs and increased student achievement has been the focus of much research. Studies have been conducted correlating professional learning communities and increased student achievement. Vescio, Ross, and Adams (2008) reviewed 11 studies regarding the impact of PLCs on teaching practices and student learning. Eight of the studies examined the relationship between teachers' participation in PLCs and student achievement and found that in all cases, student learning improved. Participation in learning communities improved teaching practices through collaboration, focused on student learning, and ultimately improved student achievement scores over time (Vescio et al., 2008).

McLaughlin and Talbert (2006) reviewed studies on increased student achievement and reported that teacher learning communities were pivotal to increased student learning. The synthesis of studies led McLaughlin and Talbert to claim the following, "There are positive effects of teacher learning community measures on student achievement for both regional and nationally representative school samples" (p. 9). They also noted that there are "Strong correlations of teacher learning community with teaching practices that predict student learning gains" (p. 9). Finally, their review led to the acclaim that there are "Strong correlations of teacher learning community and student experiences of their school and class" (p. 9). Data that supported this included the National Longitudinal Study of 1988, Lee & Smith's Study in 1995, and Lee, Smith, & Croninger's study of 1997 (Lee & Smith, 1995; Lee, Smith, & Croninger,

1997, NELS, 1988). All studies supported the idea that student perform at higher academic levels when their teachers have collective responsibility for all students.

Increased student achievement with the implementation of professional learning communities was also supported in an early childhood longitudinal study conducted by John Burdett. Burdett (2009) identified several variables that corresponded to the dimensions of PLCs and had a statistically significant effect on student achievement in math and reading over time. The study revealed that shared and supportive leadership, shared values and vision, shared personal practice, and supportive conditions had a statistically significant effect on math and reading achievement level from Grades 3-5.

Studies illuminating increased student achievement associated with the implementation of professional learning communities were not necessarily congruent. Kishawn Smith (2010) investigated teacher perceptions of PLCs and whether their implementation affected student achievement. The study examined the relationship between the dimensions of PLCs and student achievement at 11 Title I elementary schools in the Baltimore-Washington-Metropolitan area of Maryland. A PLC assessment was used to identify teachers' perceptions of PLCs within their schools. State assessment data was used to determine if the schools were meeting annual yearly progress. Test scores did not improve after PLCs were implemented in the schools.

Implementation of PLCs

Implementation of PLCs was a widely accepted approach to professional development. PLCs were regularly implemented within schools with the purpose of increasing student achievement. With the mixed findings in the area of impact of PLCs and increased student achievement, it was critical to review the research of implementation of PLCs. Research on successes and barriers for implementing professional learning communities was limited. Lujan &

Day (2010) conducted a study determining the roadblocks to successful collaboration of professional learning communities, based on DuFour's model. Successes were noted in the areas of collaboration because regular time was built into the schedule for teachers to meet, alleviating potential isolation. Differing points of view were identified as roadblocks and findings showed themes of teachers continually coming to meetings with their own agendas. DuFour (2010) identified regular built-in time in the school day as a necessary condition for a successful professional learning community. A study conducted by Linder, Post, and Calabrese (2012) also identified time as a barrier. A focus on students' needs, curriculum, and instructional practices was essential during these times (Hord, 2009). The varied conclusions of these studies, coupled with the lack of intersecting research between PLC establishment and principals, merited a study to examine this phenomenon.

Summary

This review examined paradigm shifts in professional development due to increased accountability measures in schools. It contrasted individualistic versus constructivist approaches to professional development. Studies were analyzed and supported the national professional development standards. Research demonstrated a critical need for high quality, effective, intentional, and focused staff development activities designed to help teachers make the most of instructional time (Berliner, 1990). Professional development continued to transform to a constructivist approach after the passage of NCLB. The national professional development standards supported constructivist ideas and noted the importance of collaboration in teacher learning.

Characteristics of professional learning communities were identified as forms of professional development with constructivist or job-embedded approaches. The specific names

for professional learning varied among researchers, but included similar elements. The literature revealed four common themes in professional learning communities that included: (a) collaboration, (b) shared vision, (c) leadership role, and (d) collective focus on student learning. If these elements were embedded in professional development practices collectively, schools would thus be implementing professional learning communities.

Leadership was identified as a high-impact feature in schools' professional development. The literature revealed principals' roles were critical as they directly affected time, climate, and trust. Distribute leadership qualities among principals fostered a learning environment conducive to professional learning communities.

Studies showed student achievement may or may not increase in schools that have professional learning communities. Research was limited on successes and barriers of establishing professional learning communities from principals' perspectives. Studies revealed time and collaboration were essential to the successful establishment of PLCs. This information set the stage for an investigation to determine successes and barriers to establishing professional learning communities through principals' perspectives.

This study examined the successes and challenges of establishing PLCs in 25 rural Minnesota. These rural schools developed a consortium called *The Increased Student Achievement Initiative* to pool resources, including resources to establish PLCs. Principals were responsible for providing vision and working collectively with staff to establish PLCs. Their perspectives were studied and attempted to reveal successes and challenges experienced through the PLC establishment process.

Chapter 3: Methodology

Since the passage of NCLB in 2001, schools have been attempting to meet the legislative requirements set forth to improve student achievement, and some were collaborating to do so. Such a collaboration was attempted by 25 schools in southwestern Minnesota by forming the *Increased Student Achievement Initiative*, which was a mechanism to shift professional development to a job-embedded approach by implementing PLCs. Principals' roles were paramount in PLC establishment as their functions were linked to student achievement through professional development (Haynes, 1998). Understanding principals' perspectives guided schools that were developing PLCs, so they could avoid unnecessary pitfalls and capitalize on the successes of implementation.

The purpose of this two-phase, sequential mixed methods study was to identify the successes and barriers of establishing PLCs from principals' perspectives. In the first phase, the research question quantitatively investigated the relationship of principals to the level of PLC implementation according to DuFour's PLC continuum, via an online survey (DuFour et al., 2010). Data from the first phase was explored further in a second qualitative phase. In the second phase, qualitative focus groups were used to probe existing implementation stages by exploring causes of varied PLC stages on the continuum, provided by principals during interviews. The reason for following up with qualitative research in the second phase was to better understand the closed-ended quantitative results of establishing PLCs. To triangulate the data and increase validity, document reviews of annual reports from the 25 districts were analyzed to verify consistent themes determined by the previous data sources.

The research question was, "What are the successes and barriers in establishing professional learning communities (PLC), from principals' perspectives?" This question was

answered through a mixed methods study of the perceptions of 25 principals in southwestern Minnesota. The study included a survey, focus groups, and document review.

This chapter discusses the overall research design of the study, rationale for the study, data-collection procedures, participant groups, validity, bias, and data analysis. The design and rationale for the study addressed the purpose and methodology that was used. Quantitative and qualitative data-collection procedures discussed the tools used to collect, mix, and triangulate the data. The participant groups discerned the relevance of principals' involvement in the study. Content-related evidence and construct-related evidence of validity was identified and addressed. Biases were disclosed and identification of mitigation strategies noted. Finally, the data analysis section addressed data disaggregation from both quantitative and qualitative collections and analysis procedures.

Research Questions

This study examined principals' perceptions of successes and barriers in establishing professional learning communities.

The research questions were:

1. What successes are identified in establishing the PLC model within a district?
2. What challenges are identified in establishing the PLC model within a district?

Design of the Study

Choice of a study design was determined by the research problem or issue being studied (Creswell, 2009). A quantitative study design investigated samples in which results could be generalized and provided quantitative or numeric description of trend, attitudes, or opinions (Creswell, 2009). Qualitative research studies sought to obtain greater understanding in meaning and detail (Merriam, 1995; Fraenkel & Wallen, 2006), through interpretations of participant

experiences (Merriam, 1988). This study found generalized answers through numeric descriptions via an online survey and search for additional in-depth meaning through focus groups. When seeking both generalizations and meanings of phenomenon or concepts in order to completely answer the investigable question, a mixed methods design was appropriate (Creswell, 2009).

“Mixed methods research can be defined as the collection, analysis, and integration of quantitative and qualitative data in a single study or in a program of inquiry (Creswell, Plano, & Clark, 2007). “Its core characteristics include collecting both quantitative and qualitative data, rigorous and persuasive methods associated with both forms of data, and integration of the two data sets by connecting them sequentially” (Sweetman, Badiee, & Creswell, 2010). This study first investigated the relationship of principals to their level of PLC implementation based on DuFour et al. continuum through a close-ended question survey. The continuum was published as a non-copyrighted document in the book titled *Learning by Doing* (DuFour et al., 2010). Second, the study utilized quantitative survey data to generate focus group questions that sought reasons for variation, revealing successes, and challenges.

Priority, or more weight, was placed on the qualitative components, as successes and barriers determined from focus group questions; thus, the qualitative components were the largest contributing factor in answering the research questions. The use of theory in this study was inductive, as used in qualitative inquiry (Creswell, 2009). The mixing of data occurred through connecting the results from the quantitative survey and explored these in more depth during the qualitative phase. Furthermore, data from the focus group questions and document review were connected to verify consistencies and inconsistencies of themes identified in the qualitative research phase.

Rationale

For this research study, PLC establishment, the researcher utilized mixed methods methodology and focused on successes and challenges from principals' perspectives as the unit of analysis. The researcher used a close-ended survey to generate responses regarding PLC implementation and open-ended focus group questions to explore the phenomenon in more depth. The study design warranted a mixed methods approach, as it was necessary to first identify generalization of PLC implementation, in order to probe for deeper meaning in phenomena: identifying successes and challenges.

“In mixed-methods design format, the researcher brings together approaches that were included in both the quantitative and qualitative formats” (Creswell & Plano Clark, 2007). “A mixed methods design is useful when either the quantitative or qualitative approach by itself is inadequate to best understand a research problem or the strengths of both quantitative and qualitative research can provide the best understanding” (Creswell, 2009, p. 18). This study included collecting closed-ended numerical data that identified the degree of implementation (Creswell, 2009) and open-ended focus group questions that generated deeper meaning (Merriam, 1988). “In these situations, collecting both closed-ended quantitative data and open-ended qualitative data proved advantageous to answer the investigable question” (Creswell, 2009, p. 19).

Types of mixed methods approaches included sequential, concurrent, or transformational. A sequential mixed methods approach consisted of intentionally collecting quantitative or qualitative data first, followed by the collection of the other (Creswell, 2009). Concurrent mixed methods included data collection of both quantitative and qualitative data simultaneously (Creswell, 2009). Transformative mixed methods approach collected data at the same time

similar to sequential or concurrent; however, addressed an issue focused on “...underrepresented or marginalized groups or individuals” (Creswell, 2009, p. 123). Since this study necessitated the quantitative survey data collected first to provide a foundation for the development of qualitative focus group questions, it reflected and used the sequential mixed methods approach. This mixed methods approach was necessary as the timing of data collection was critical (Creswell, 2009).

The study design considered only using grounded theory, as grounded theory seeks greater understanding of a case (Stake, 1995). “Grounded theory is a systematic discovery of the theory from the data of social research” (Glaser & Strauss, 1967, p. 3). This study was consistent with grounded theory design, as “theories are not generated before a study begins, but formed inductively from the data that are collected during the study itself” (Frankel & Wallen, 2006, p. 437). The study sought greater understanding which was congruent with grounded theory; however, it needed to first analyze previously collected numerical responses consistent with a quantitative method, in order for the appropriate focus group questions to be developed. Thus, grounded theory design alone was not adequate to answer the research question.

Data Collection

Principals from 25 school districts were invited to participate in the study. The mixed methods approach collected data sequentially, first from a closed-ended survey followed by open-ended focus group questions. Four aspects of data collection will be discussed in this section: setting, participants, events, and the process (Miles & Huberman, 1994).

Online survey. A web-based survey was used to ascertain where principals’ identify their schools’ progress on an implementation continuum developed by DuFour et al. and published in the book *Learning by Doing* (2010). The purpose of the survey was to generate data and provide the researcher with an understanding of areas where PLC work was at the beginning

stages and areas that were more advanced. The continuum consisted of two Likert-type scales: one with stages of implementation and another that included shifts associated with job-embedded professional development characteristics. The PLC continuum of implementation included:

- (a) “Pre-initiation – The school has not yet begun to address the principle or practice of a PLC;
 - (b) Initiation – The school has made an effort to address this principle or practice, but the effort has not yet begun to impact a critical mass of staff members;
 - (c) Implementation – A critical mass of staff members is participating in implementing the principle or practice, but many approach the task with a sense of compliance rather than commitment. There is some uncertainty regarding what needs to be done and why it should be done;
 - (d) Developing – Structures are being altered to support the changes and resources are being devoted to moving them forward. Members are becoming more receptive of the principle, practice, or process because they have experienced some of its benefits;
 - (e) Sustaining – The principle or practice is deeply embedded in the culture of the school. It is a driving force in the daily work of staff. It is deeply internalized, and the staff would resist attempts to abandon the principle or practice”
- (DuFour et al., 2010, p. 135).

A second portion of the continuum consisted of a Likert-like scale and included a 1-4 rating based on how schools have shifted work and professional development such as shifting from focus on teaching to focus on learning, and level of implementing assessments and reviewing data. Respondents could select 1= no shift to a 4= shifted completely.

Inferences were made from generalizing this data (Babbie, 1990) so probing questions could be developed and asked in the second data-collection phase. A survey was the most appropriate data-collection tool for this part of the research phase, as it was economical, simple to administer, provided timely feedback, and gathered data from a large population (Fowler, 2002). The data collected through the survey were collected at one point in time.

The SurveyMonkey[®] platform was used to administer the survey. This tool was used to generate data and provide analysis via descriptive statistics and graphed information. The survey was open for approximately 3 weeks. The collection timeframe was similar to mailed survey administration steps identified by Salant and Dillman (1994) in order to address reliability in the quantitative data collection process. The survey delivery process was congruent with Salant and Dillman's (1994) mailed survey process in that an advance-notice letter was mailed to the sample individuals prior to the survey administration. An email was sent to potential participants describing the survey prior to its dissemination. Second, the online survey was sent approximately 3 days after the initial email. A reminder email was sent with 1 week remaining in the data collection phase. When the survey was closed, a thank you email will be sent to all potential participants.

Survey questions included Likert rating scales and included 25 closed-ended multiple-choice questions with several parts to some questions. It was estimated to take participants approximately 20 minutes to complete. The survey data was reviewed and results were used to determine focus group interview questions. The data analysis section discussed how data from the survey will be analyzed and used to develop focus group questions.

Focus group interviews. Approximately 1 month after the online surveys were conducted, three focus group sessions were held with principals representing all 25 school

districts. All focus group sessions occurred on the same day. Each focus group had approximately 10 participants. The optimal number of respondents per focus group was 8-12 (Morgan & Krueger, 1997). An interview protocol was used to ensure reliability of the focus group data collection process. It included instructions for the interviewer to follow to ensure that standard procedures were used for each focus group, between 8 and 10 pre-planned questions, probes for each question, and a final thank you statement to participants (Creswell, 2009). The conversations were semi-structured, meaning that pre-determined questions were asked and the researcher was able to ask follow-up questions to each initial pre-determined question (Creswell, 2009). Due to potentially different levels of PLC implementation, the ability to ask follow-up questions through a semi-structured approach was necessary to discern specific successes and challenges.

The researcher made participants aware of data collection procedures. A portable digital audio recording device was used to collect data. The researcher also took notes during the focus group interviews. The data collected on the audio recording device was transcribed. Analysis of focus group questions are discussed in the data analysis section.

Participants

There were 39 principals leading schools within the 25 school districts in southwest Minnesota (Southwest Service Cooperative, 2012). The 39 principals were comprised of 27 males and 12 females (Southwest Service Cooperative, 2012). The Southwestern Service Cooperative reported 14 out of the 25 districts have more than one principal (2012). These individuals had the opportunity to participate in the online survey by choice. There were 35 principals that participated in the focus group events.

Creswell (2009) articulated purposive sampling as appropriate in qualitative data collection procedures versus random sampling often used in quantitative processes. The quantitative survey was sent to all 39 principals, but randomness occurred as (a) not all principals responded and (b) principals anonymity was assured, as no identifying information was requested on the surveys. The qualitative focus groups included 37 principals. It was important to purposefully have input from as many of the *Improving Student Achievement* districts as possible, to provide data that correctly reflected the consortium of schools participating.

The focus group interviews were held at Southwest Minnesota State University in Marshall, Minnesota. Participants were in board meeting type rooms. There were between 11-14 participants in each group. The participant groups conducted other business for a 3 hour timeframe. The focus group interviews took place within this time.

The Southwest Service Cooperative provided the researcher with a list serve to contact principals for participation. To keep participants identity anonymous, the list of invited principals is not available in this document. The researcher obtained a written letter of consent from the superintendent of the Worthington School District (see Appendix C). The letter provided acknowledgment and approval to use the data gathered by the researcher for data collection and analysis purposes as a part of this study. The superintendent oversees the principals and coordinates efforts among other superintendents within the *Improving Student Achievement Initiative*.

Data Analysis and Organization

Both quantitative and qualitative analysis occurred in this two-phase sequential mixed methods study. Analysis of the data generated through the quantitative online survey was analyzed using descriptive statistics. Analysis of data obtained from the qualitative research

method of focus groups was coded and themes identified based on grounded theory methodology. The data was triangulated by comparing evidence from yearly document reviews submitted by school districts to themes identified from the focus group results.

Quantitative. The researcher analyzed the quantitative data derived from the closed-ended online survey. First, the number of members who did and did not return the survey was noted. Second, the researcher checked for response bias, which is the effect of nonresponses on survey estimates (Fowler, 2002). This was done using wave analysis, which included the researcher reviewing the surveys submitted during the first, second, and third weeks of the collection. If the responses began to change near the end of the collection period, a potential for response bias may have existed (Creswell, 2009). This was measured by categorizing data generated each week. If responses shifted towards one end of the continuum in week three, a bias may have existed (Fraenkel & Wallen, 2006).

An analysis was completed using descriptive statistics. Troachim (2006) identifies descriptive statistics as the basic features of a study, including standard deviation and mean. The mean was similar to the average. All numbers were added and divided by the total number. The mean revealed the average answers provided by participants. The standard deviation identified outliers, which negated the need to develop interview questions from such responses. Quantitative scores derived informed the researcher in determining how to develop focus group questions.

Data was given a score a, b, c, d, or e from pre-initiating to sustaining and (1-4) and for not at all shifted to completely shifted. This provided the researcher with an overview of implementation on PLC continuum. The purpose of the survey was to provide the researcher

with a generalization from which to generate focus group questions. The total potential sample size was 39. The researcher predicted some of the sample would be non-respondents.

The results from the survey were not expected to answer the research question. Patterns from the results, combined with reviewing the range of scores, mean, and standard deviation provided information from which focus group questions were generated.

Qualitative. Focus group data was analyzed using grounded theory methodology, a qualitative strategy of inquiry. Grounded theory methodology generates theories from observations (Corbin & Strauss, 1990). The resulting theory is an explanation of categories, their properties, and relationships among them (Corbin & Strauss, 1990).

First, the data was organized and prepared for analysis. Data transcription entailed digitally recorded focus group interviews via the researcher. Upon the completion of transcription, the transcript was uploaded into a software program called MAXQDA. A personal computer based transcription software program provided open coding of statements, memoing and categorizing according to themes.

Second, the researcher read through all the transcribed data to get a general sense of the information and reflect on the overall meaning. The researcher reviewed document items that might be major themes, unique perspectives, and recurring comments.

Third, the data coding process began using grounded theory methodology. Grounded theory methodology includes open coding, which identifies categories from data, axial coding compares data to categories identified, and selective coding creates a theme from the categories connections (Creswell, 2009). The coding process, described below, was conducted using MAXQDA software.

The MAXQDA software coded via the following method. Open coding began by assigning a main idea to each statement. Whenever statements had similar meanings, they were given the same name. Coding was conducted on each statement independently. The responses to questions were reviewed for natural breaks of one answer selection over another, also known as saturation points (Creswell, 2009). Natural break points were identified as data having two or more of the same ideas mentioned over others. This process continued until one or more main ideas emerged and saturation was determined. Once data saturation was identified, the theme was included in the final analysis. Even after saturation occurred with one or more main ideas, coding continued for all remaining data. All identified main ideas were analyzed according to their relationship with each other. In addition, analysis of other possible relationships and ideas were included. Subsequently, the overall themes were identified. Finally, the researcher interpreted the data. This included making sense of themes, describing phenomena, or generating additional testable research questions to further investigate.

The researcher ensured reliability in the following ways. The transcripts were reviewed during data analysis to verify that mistakes were not made during transcription. The researcher was cognizant of code definitions throughout the analysis process, ensuring that there was not a shift in the definition of codes or the meanings of them. By the researcher being aware and cross-checking these items, the study was reliable and provided the ability to be replicated in the same manner.

Credibility and Validity

In order to achieve credibility for the findings of this study, several validity strategies were used. Validity is defined as the appropriateness, correctness, and meaningfulness, and usefulness of the specific inferences researchers make based on the data they collect (Fraenkel &

Wallen, 2006). Validation is the process of collecting and analyzing evidence to support such inferences (Fraenkel & Wallen, 2006). This sequential, mixed methods research study addressed threats to validity and mitigated dangers that may invalidate inferences and conclusions.

Content-related evidence of validity. Content-related evidence connects to adequacy of reviewing all content versus a sample of the instrument that will be used and the format of the instrument (Fraenkel & Wallen, 2006). The PLC continuum that was used was constructed based on previous research and publications by Richard and Rebecca DuFour. It is a tool that practitioners use to determine the degree of implementation of PLCs. It is comprehensible, as it uses educator-based language and was intended for practitioners familiar with PLCs. All participants completing the survey had a basic working knowledge of PLCs. All questions were available for the researcher to view prior to the survey dissemination. The format was reviewed to ensure the size of type, appropriateness of language, and comprehensible directions.

Construct-related evidence of validity. Different types of evidence should be collected to allow cross-referencing and verification of inferences (Fraenkel & Wallen, 2006). In this study, participants will be probed for deeper meanings through focus groups to determine successes and barriers in establishing PLCs. Each school district submits a yearly report that includes four sections: accomplishments, road-blocks, lingering questions, and next steps. These items will be triangulated against the themes identified through the focus groups to verify responses. Triangulation establishes validity of a researcher's observations by checking what is heard and seen with other sources of information (Fraenkel & Wallen, 2006).

Bias

Bias is the possibility that certain characteristics or ideas of observers may bias what they see (Fraenkel & Wallen, 2006). The researcher currently works in a school district that

participates in the *The Increasing Student Achievement Initiative*. The researcher is passionate about job-embedded professional development and believes DuFour's PLC model is acceptable. To mitigate any biases posed by the researcher, individual viewpoints will be reflected upon and documented throughout the study.

Summary

In summary, the methodology for this study to answer the research question regarding principals' perceptions of successes and barriers in establishing professional learning communities was a mixed methods study. Online surveys will be administered to the participant group to generate quantitative data. Results of the survey will be used to develop appropriate focus group questions. Focus groups will be held with principals to generate theories and discern successes and challenges. Schools' yearly PLC reports will be used to triangulate and confirm or negate the theories identified in the qualitative phase. Since the qualitative data is needed in addition to the quantitative surveys, a mixed methods approach is necessary.

The sample will include principals from 25 school districts participating in the *Student Achievement Initiative*. The survey will be sent to all principals and all principals will participate in the focus groups.

The results will be valid, as the content for the survey is based on prior research and is a usable tool for practitioners. Additionally, triangulation of the two phases of the mixed methods through document review will verify themes. Bias will be mitigated through reflection and documentation.

Data analysis with descriptive statistics will analyze the survey data. Open coding will be conducted on the focus group data, followed by the generation of themes. MAXqda software will

be used to transcribe and code focus group data. Document reviews will be analyzed for themes congruent with those identified through the focus group data analysis.

Through this investigation, successes and challenges in establishing PLCs in schools that are part of the *Improving Student Achievement Initiative* will be determined. Findings of this study will inform superintendents, teachers, and stakeholders in future PLC establishment. Identifying these characteristics will provide a platform of considerations when planning professional development that shifts to a job-embedded approach.

Chapter 4: Presentation and Analysis of Data

The purpose of this mixed methods study was to identify successes and challenges of establishing professional learning communities from the perspective of principals. Closed-ended surveys were administered to make generalizations and provide a foundation for the development of focus group questions. The data were triangulated with yearly progress reports completed by each school district. The research questions that guided the study included:

1. What are the successes in establishing PLCs from principals' perspectives?
2. What are the barriers in establishing PLCs from principals' perspectives?

This chapter presents the demographic information associated with participants and data collection processes for both the surveys and focus groups. Findings that were presented from the quantitative surveys provided rationale for the development of focus group questions. Tables were provided to help interpret the level of implementation of PLCs from principals' perspectives. Results and themes were reported from the qualitative focus groups. Bias, validity and reliability were discussed, and finally a summary of the findings was reported.

Quantitative Surveys

Closed ended surveys were sent to 39 principals who participated in the *Improving Student Achievement Initiative*. There were 33 principals who responded to the survey. Of the 33 respondents, four participants answered less than five questions. These respondents were removed from the survey, thus a total of 29 responses were included in the survey results. Of the 29 participants, 20 males responded and 9 females responded.

Participants were asked to identify how many years they have been a principal and were given choices of 1-3 years, 4-6 years, 7-9 years, 10-12 years, and more than 12 years. Of the 29 respondents, 6 of the principals reported they have been in this position for 1-3 years, 8 of the

principals have been in this position for 4-6 years, 4 have been in the position for 7-9 years, 5 have been in the position for 10-12 years, and 6 have been in the position for more than 12 years. The majority of principals (23) had been involved in the *Improving Student Achievement Initiative* since its inception (79.4%) This meant they had been a principal in the current district or another district that was part of the initiative for three years. Three respondents (10.3%) had been involved for two years and three additional respondents (10.3%) had been involved for one year.

The survey presented a question based on a Likert scale that asked participants to identify their overall implementation stage of professional learning communities. The remaining questions were also based on a Likert scale and asked respondents to report their school's progress of the implementation of PLCs. Answers depicted how their schools have shifted work and professional development in the following areas:

- assessments
- teacher work
- focus on PLCs
- school culture
- professional development practices

Respondents could select 1= no shift, 2 = partially shifted, 3 = mostly shifted, 4= shifted completely.

The survey was developed based on the degree of implementation associated with successful PLCs as presented in *Learning by Doing* (DuFour et al., 2010). The continuum was published in the *Learning by Doing* book (DuFour et al., 2010) and was put into a survey format for participants to respond with their school's level of movement in each of the areas noted above.

Descriptive statistics were used to analyze the survey results included standard deviation and mean, which were calculated for each Likert question. The results indicated the degree of PLC implementation or amount of shifting that occurred. These results were the foundation for the development of the focus group questions.

Salant and Dillman's (1994) protocol was followed to administer the survey and included the following: An email was sent to potential participants describing the survey. The survey was sent via e-mail three days later. The survey remained open for three weeks. With one week remaining in the data collection phase, the researcher sent a reminder email to potential participants. One day after the survey closed, a thank you email was sent to all potential participants. Email addresses used for the participants were obtained from the Southwest West Central Service Cooperative.

Qualitative focus groups. Focus group questions were developed based on results from the quantitative survey (See appendix D). The goal was to ascertain themes of successes and barriers associated with establishing PLCs. There were three focus groups conducted with a total of 37 principals. The focus groups were disaggregated by building level assignments of principals; thus, they were either elementary, middle school, or high school levels. Principals with responsibilities for K-12 were either in the middle school or high school focus group. The elementary principal focus group had 12 participants, the middle school focus group had 11 participants, and the high school focus group had 14 participants. The focus groups were held at Southwest State University, in Marshall, Minnesota. The duration of each focus group session was approximately 30 minutes.

The interviews consisted of eleven questions that were developed based on the results of the survey responses. Follow-up questions were asked because the interviews followed the semi-

structured approach (Creswell, 2009). A portable digital audio recording device was used during the focus groups to capture accurate data. In addition, the researcher took notes during the conversations. The data collected on the audio recording device was transcribed verbatim. The transcripts were uploaded into MAXQDA software program for open coding to be conducted. Themes were generated and were discussed in the qualitative findings section of this chapter.

Quantitative Survey Results

The respondents were asked to report their overall PLC implementation level from. Below is a description of each stage.

- (f) “Pre-initiation – The school has not yet begun to address the principle or practice of a PLC;
- (g) Initiation – The school has made an effort to address this principle or practice, but the effort has not yet begun to impact a critical mass of staff members;
- (h) Implementation – A critical mass of staff members is participating in implementing the principle or practice, but many approach the task with a sense of compliance rather than commitment. There is some uncertainty regarding what needs to be done and why it should be done;
- (i) Developing – Structures are being altered to support the changes and resources are being devoted to moving them forward. Members are becoming more receptive of the principle, practice, or process because they have experienced some of its benefits;
- (j) Sustaining – The principle or practice is deeply embedded in the culture of the school. It is a driving force in the daily work of staff. It is deeply internalized,

and the staff would resist attempts to abandon the principle or practice”

(DuFour et al., 2010, p. 135).

Percentages were calculated for stage implementation levels of PLCs and disaggregated according to principal’s length of service. Mean and standard deviation were calculated for each question associated with shifts in practice based on the establishment of PLCs. Characteristics associated with each implementation level can be found in Appendix D.

Table 2

Stages of PLC Implementation

Stage	Overall Percentage	1-3 yrs.	4-6 yrs.	7-9 yrs.	10-12 yrs.	<12 yrs.
Pre-initiation stage	0%	0%	0%	0%	0%	0%
Initiation stage	9.7%	0%	0%	25%	16.7%	16.7%
Implementation stage	29.0%	16.7%	33.3%	25%	33.3%	33.3%
Developing stage	48.4%	66.7%	66.7%	50%	33.3%	16.7%
Sustaining stage	12.9%	16.7%	0%	0%	16.7%	33.3%

Note. The categories 1-3, 4-6, 7-9, 10-12, and <12 indicate principals length of service in the position.

Overall, 77.4% of principals reported that their schools were in the implementation or developing stage of PLCs. There were 12.9% of principals who reported their schools were in the sustaining stage, and 9.7% of principals reported their school was in the implementation stage. No respondents reported that their school was in the pre-initiating stage.

The implementation level data were disaggregated according to principals' length of service. Schools in the implementation stage were reported by principals who had seven years or longer tenure. Overall, principals with 10 or more years of service reported a larger spread of stages ranging from the initiation stage to the sustaining stage. Principals with six years of service or less all reported that their PLCs were at the implementation stage or higher.

The second section of the survey included five focus area categories that asked respondents to report on their school's shifts. Categories included:

- shift in fundamental purpose of the school's PLCs
- shift in the use of assessments
- shift in the work of teachers in school's PLCs

- shift in school's culture
- shift in professional development

Each focus area had between four and nine statements that respondents ranked. Responses were collected on a 1-4 Likert scale. Response choices included a selection of 1 = no shift, 2 = partially shifted, 3 = mostly shifted, and 4 = shifted completely. Responses of three or four indicated a higher level of shifting and were associated with and indicated schools were more highly developed in the implementation process. Responses of one or two indicated lower levels of implementation within the PLC establishment process.

The findings below were arranged from higher implementation levels which were indicated by a mean and standard deviation. The two areas with the highest mean and lowest standard deviation were congruently reported with the first research question, "What are the successes of establishing PLCs from principals' perspectives?" The three areas with the lowest mean and largest standard deviation were reported under the second research question, "What are the barriers of establishing PLCs from principals' perspectives?" The survey data was generalized and used to guide the development of focus group questions. The tables below revealed mean and standard deviation for each category.

Research Question 1

Table 3

Shift in Fundamental Purpose of PLCs

Shifts	M	SD
From a focus on teaching to a focus on learning	3	1
From coverage of content to demonstration of proficiency.	3	1
From an emphasis on what was taught to a fixation on what students learned.	2.7	0.6
From providing individual teachers with curriculum documents such as state standards and curriculum guides to engaging collaborative teams in building shared knowledge regarding essential curriculum.	2.6	0.6
Categorical	2.8	0.6

Note: Categorical mean and standard deviation were calculated using the raw data of all statements within the category.

The table revealed the mean and standard deviation for each of the four statements associated with the fundamental purpose of PLCs. “A shift from a focus on teaching to a focus on learning” and “a shift from coverage of content to demonstration of proficiency” had the highest mean. However, these had the least consistent responses, with a calculated standard deviation of one. “Shifting from an emphasis on what was taught” to “a fixation on what students learned, along with shifting to collaborative teams in building shared knowledge of curriculum.” These had the most consistent responses, with calculated standard deviations of 0.6 and 0.7. From the five overall categories surveyed, the focus on fundamental purpose revealed the highest overall mean and lowest standard deviation, indicating schools are further along in this implementation stage than others.

Table 4

Shifts in Work of Teachers in Their School's PLCs

Shifts	M	SD
From isolation to a focus on learning.	3	1
From each teacher clarifying what student must learn to collaborative teams building shared knowledge and understanding about essential learning.	2.6	0.7
From each teacher assigning priority to different leaning standards to collaborative teams establishing the priority of respective learning standards.	2.6	0.8
From each teacher determining the pacing of the curriculum to collaborative teams of teachers agreeing on common pacing.	2.5	0.8
From individual teachers attempting to discover ways to improve results to collaborative teams of teachers helping each other improve.	2.6	0.7
From privatization of practice to open sharing of practice.	2.9	0.7
From decisions made on the basis of individual preferences to decisions made collectively by building shared knowledge of best practice.	2.6	0.8
From “collaboration lite” on matters unrelated to student achievement to collaboration explicitly focused on issues and questions that most impact student achievement.	2.4	0.9
From an assumption that these are “my kids, those are your kids” to an assumption that these are “our kids.”	2.6	0.8
Categorical:	2.6	0.8

Note: Categorical mean and standard deviation were calculated using the raw data of all statements within the category.

The statement “from isolation to focus on learning” reported the highest average within the category. However, this statement also had the highest standard deviation. The statement “from collaboration lite on matters unrelated to student achievement to collaboration explicitly focused on issues and questions that most impact student achievement” statistically revealed the lowest mean. This statement statistically had the second highest standard deviation of 0.9. All

remaining responses had an average of 2.5 or 2.6. Excluding the high and low mean numbers, the remaining data presented a standard deviation of 0.7 or 0.8.

Research Question 2

Three categorical response areas that indicated the lowest average and highest standard deviation had a lower degree of PLC implementation than those listed under research question one. Generalizations made of lower implementation levels were used to develop the qualitative focus group questions. The three remaining categories that revealed the overall lowest mean and largest standard deviation were reported below.

Table 5

Shifts in Professional Development

Shifts	M	SD
From learning by listening to learning by doing.	3	1
From the expectation that learning occurs infrequently to an expectation that learning is ongoing and occurs as part of routine work practice.	2.7	0.7
From learning individually through course and workshops to learning collectively by working together.	2.6	0.7
From external training to job-embedded learning.	2.5	0.6
From assessing impact on the basis of teacher satisfaction to assessing impact on the basis of evidence of improved student learning.	2.4	0.8
From short-term exposure to multiple concepts and practices to sustained commitment to limited focused initiatives.	2.4	0.7
From presentations to entire faculties to team-based action research	2.2	0.7
Categorical	2.5	1

Note. Categorical mean and standard deviation were calculated using the raw data of all statements within the category.

A shift from “learning by listening to learning by doing” had the highest degree of implementation with Likert rating of 3. It also had the highest standard deviation calculation of 1.0. The “shift from presentations in large group faculties to team based action research” statistically had the lowest overall average, with a score of 2.2. The standard deviation for this statement was 0.7, which was consistent among other statements within this category. This category, along with the school culture category, displayed the highest standard deviation with a calculation of 1.0, indicating that responses were less consistent among participants.

Table 6

Shifts in Use of Assessments in Your School's PLCs.

Shifts	M	SD
From assessments to determine which students failed to learn by the deadline to assessments to identify students who need additional time and support.	2.5	0.8
From infrequent summative assessments to frequent common formative assessments.	2.4	0.8
From assessments used to reward and punish students to assessments used to inform and motivate students.	2.4	0.7
From assessing many things infrequently to assessing a few things frequently.	2.4	0.7
From an over-reliance on one kind of assessment to balanced assessments.	2.3	0.7
From each teacher determining the criteria to be used in assessing student work to collaborative teams clarifying the criteria and ensuring consistency among team members when assessing student work.	2.3	0.8
From focusing on average scores to monitoring each student's proficiency in every essential skill.	2.3	0.8
From individual teacher assessments to assessments developed jointly by collaborative teams.	2.2	0.8
Categorical	2.3	0.8

Note: Categorical mean and standard deviation were calculated using the raw data of all statements within the category.

The statement, “from assessments to determine which students failed to learn by the deadline to assessments that identify students who need additional time and support,” revealed the highest average within the category of 2.5. The standard deviation for that statement was the same as others in the category with a calculation of 0.8. The lowest statement average in the category was 2.2 and stated “from individual teacher assessments to assessments developed jointly by collaborative teams.” The standard deviation for this statement was 0.8, which was consistent with others in the category. All standard deviations for this category were 0.7 or 0.8.

Table 7

Shifts in School Culture

Shifts	M	SD
From independence to interdependence.	2	1
From a language of complaint to a language of commitment.	2	1
From long-term strategic planning to planning for short-term wins.	2	1
From infrequent generic recognition to frequent specific recognition and a culture of celebration that creates many winners.	2.4	0.7
Categorical:	2.1	1

Note: Categorical mean and standard deviation were calculated using the raw data of all statements within the category.

The category of school culture had the overall lowest mean of 2.1 and the highest standard deviation of 1.0, as well as the professional development category. The statement that received the highest score was “a shift from infrequent generic recognition to frequent specific recognition and a culture of celebration that creates many winners.” Overall, this statement had a mean of 2.4 and standard deviation of 0.7. The remaining three statements in this category which focused on school culture all had means of 2 and standard deviations of 1.0.

Focus Group Question Development

The purpose for the closed ended survey was to gain generalizations regarding the implementation levels of PLCs, as reported by principals that participated in the *Improving Student Achievement* Initiative. The generalizations were used to develop focus group questions that would qualitatively reveal themes associated with establishing successes and barriers in establishing PLCs from principals’ perspectives. This provided the framework for survey question development.

Category One asked respondents for the level of implementation of fundamental purpose of PLCs. Principals reported the highest shift as “a focus from teaching to a focus on learning.” The focus group question asked, “What supports have moved teachers from an individual focus on teaching to a collective focus on learning?”

Category Two asked respondents to rank their school’s shift in work of teachers in their school’s PLCs. The statements focused on collaboration and revealed higher levels of implementation as compared to several other categories. A focus group question included, “Has collaboration changed from the beginning PLCs to now? If so, how?”

Category Three asked respondents to rate their school’s shift in professional development. Based on responses, a survey question included, “What professional development offerings have changed in your school since the inception of PLCs?” This question elicited specific areas of changes in professional development. Constructivist approach professional development practices were developed from this question.

Category Four asked principals to rate their school’s shift in the use of assessments. The responses in this category statistically had the second lowest overall mean and standard deviation. Focus group questions were developed to investigate this further. The first question asked, “Has data played a role in your PLCs? If so, how?” The second question asked, “What differences have you observed in type of assessments administered since starting PLCs?”

Category Five asked principals to rate their school’s shift in culture since the inception of PLCs. This category had the lowest mean and highest standard deviation responses in the survey. The highest statement response within this category was, “shift from infrequent generic recognition to frequent specific recognition and a culture of celebration that creates many

winners.” The focus group question that was generated included, “Does your school collectively celebrate successes? If so, how?”

Additional questions generated for the focus groups were, “What are the barriers in place that impede your staff from implementing PLCs?” “How does your school address these barriers?” “What role has time and structure played in PLCs?” and “What has been the impact of PLCs on student achievement in your district?” The questions developed based on the survey results attempted to ascertain themes with explanations or causes of each.

Qualitative Focus Groups

Focus group interviews were held at Southwest State University in Marshall, Minnesota during an in-service day that all school administrators and teachers participating in the *Improving Student Achievement* Initiative attended. During the morning of the in-service, all 1,600 teachers and administrators attended a presentation by researcher Dylan Williams on common formative assessments. In the afternoon, principals participated in one of three leadership sessions. Principals were organized into groups based on their leadership responsibilities. Groups were set up for principals serving in the elementary, middle school, and high school levels. Principals who provided leadership to a K-12 building attended either the middle school or high school session. The researcher attended each principal session for approximately 45 minutes and conducted the focus group interviews.

At the beginning of each focus group, the researcher identified herself and made the participants aware of the purpose of the focus group and data collection process. Participants were informed that their identities would be anonymous in the transcription of interviews and reports of interview findings. If respondents identified their school during the interview, the

transcript included a blank where the school name was stated. This provided anonymity for all respondents in the process.

Participants were asked to speak in a loud voice and not to speak too quickly. A snack was provided for focus group interview. The researcher had a digital recording device and placed it on the center of each table. The focus groups took place in an office or board room location. Upon the culmination of each interview, the researcher thanked the participants and informed them of their ability to read the final manuscript.

Qualitative Data Analysis

Upon the completion of the digitally recorded interviews, the data was manually transcribed by the researcher verbatim. The transcripts were reviewed four times to ensure accurate transcription was completed. See Appendix E for the complete interview transcripts.

Three Microsoft Word[®] files were created. One file stored the elementary transcript, one stored the middle school transcript, and one stored the high school transcript. Transcripts were formatted with an “I” which indicated the interviewer was speaking and an “P” which indicated a participant was speaking. Each file was uploaded into a coding software program called MAXQDA. The MAXQDA program provided coding schemes and colors. It filtered similarly coded statements. This allowed the researcher to physically group similar statements. The software program also numerically calculated the number of times a code was used. The researcher was able to use the codes with the highest number of statements as a tool to identify themes. Each theme was exported with its code into Microsoft Excel[®] for review. The potential themes were reviewed to ensure there was substantial enough evidence to merit a theme.

The first research question was, “What are the successes of establishing a professional learning community from principals’ perspectives?” Three themes were identified in this area

which included: increased school focus, curriculum alignment, and teacher competence in common assessment development. The second research question was, “What are the barriers of establishing a professional learning community from principals’ perspectives?” Two themes were identified in this area and included: organization and school culture. Four sub-themes were identified under organization and included external stakeholders, specificity versus ambiguity, structure and time, and size. The themes associated with the successes and barriers will be discussed below.

Theme 1: Increased school focus. An increased school focus was a theme that was discussed among all three interview groups. The reference to focus in the interview questions included, “What supports have moved teachers in your district from an individual focus on teaching to a collective focus on learning?” Only one question presented by the interviewer referenced focus during each session. The principals’ conversations of increased focus on student learning were discussed when questions other than the one listed above were asked. Respondents identified focus in specific areas including student learning, outside resources, learning targets, assessments, and professional development.

Overall respondents agreed with the statement that articulated, “...for us it’s been more singularly focused. The parts that go into PLCs, whether essential outcomes, standards based, data, etc.” Additional respondents agreed stating, “It has brought into focus what the children are actually learning.” The connection of focus on student learning was a main idea in DuFour’s model, which was the model the school districts participating in the study were following.

Participants noted the movement of their school in this focused direction regarding student learning by stating,

...I've seen some change in thought process in some of the data or grade given to students. Not on an average of test scores, but on an assessment that the teacher knew the student was an A student. The student got a D on a test. The teacher talked to the student for the various reasons why that was. The student was given the opportunity to do the test over. Instead of giving the student a B in the class, they gave the student an A in the class. And the reason they chose to do that was that they had completed it, what the individual instructor wanted to have completed regarding thought process. And I've seen a little bit of change in that.

This statement was a representative example of interview comments pertaining to focus on student learning.

Another focus area discussed among participants included the focus that has occurred due to the development of common assessments. Overall, respondents reported that developing common assessments has focused teachers on essential outcomes and provided opportunities for teachers to have focused purposeful discussion. One principal noted that his school has become increasingly focused and stated, "It's like we are speaking the same language with formative assessments."

Increased focus was also identified by participants in regards to professional development. One principal articulated that, "Even though we aren't with the other 25 schools (doing professional development), we are doing something pertaining to what others are doing as well." This was in reference to in-service time throughout the school year in which all schools don't come together. Even though teachers were not in the same physical location, all districts were focused on work to move PLCs forward.

Principals maintained their passion for focus through gleaning insight into their future plans for their school. One principal stated,

I'll talk about my upcoming in-service day for ½ day. Right now, my goal is to bring in someone from the state of Minnesota to talk about how the common core standards are connected to the power standards or essential learner outcomes and how to lay all that in. At this point in time, so we can continue to move forward with PLCs, to do the common assessments and the summative assessments so we can wrap all of that in with the couple of years, we've got to have those things laid into our curriculum and put in to the strands and standards we are dealing with. I think we've got to continue to move forward and give staff opportunities to learn and utilize things like that in the PLC groups. And you know, these half day in-services that are coming that we all have to deal with, I think it's a good idea to give them the information they need to move to the next common level.

This high school principal summed up the thoughts of how school leaders are thinking forward to ensure focus was established, as it was an important element in developing and sustaining successful PLCs.

Theme 2: Curriculum alignment. Curriculum was not specifically mentioned by the interviewer throughout the series of focus group questions. However, curriculum was introduced in each focus group conversation by one or more participants. Principals identified an increase in curriculum alignment and the development of a clearer understanding of what teachers expected to help students learn, as an occurrence since the establishment of PLCs. Since PLCs began, schools aligned curriculum both horizontally and vertically. Alignment was the single most noted item when curriculum was brought into the conversation by principals. One principal reported, "Its (PLCs) helped to align curriculum."

Discussions also connected curriculum to data. Respondents maintained the need to look at data to help identify gaps in curriculum. Where weaknesses in curriculum have been identified due to alignments, principals followed up by articulating the importance of using data to determine gaps and then make changes. Below is an example of a principal connecting data to curriculum:

...but I think it's the alignment of curriculum K-12 both vertically and horizontally I think has really opened up among staff. It also has given staff a little more time to identify the strengths and weaknesses and their dealing with as far as the curriculum and the strands that are built into the state of Minnesota and I think that is where the MCA Grad testing – as they dig deeper into that, they've also identified where they need to improve curriculum and whether it's the high school setting or middle school setting program.

For participants that acknowledged gaps still existed in their curriculum, they identified venues of how data would help identify the weaknesses and develop an appropriate plan of action, “We know we have some weaknesses in our curriculum and that we need to work on and that. Teachers are working on what we need to do for those interventions and we use data to determine that.”

Purposeful selection of PLCs for teachers was discussed among participants as impacting the ability to align curriculum. Teachers, who were placed in PLCs with others teaching the same content area, had completed more comprehensive and higher quality curriculum alignments. One school acknowledged that teachers were initially allowed to self-select their PLCs. This resulted in high levels of teacher motivation within the PLC. After a period of time, the administration changed PLC membership so that each PLC had the same content area teacher participating. This

structural change increased the quality of the horizontal and vertical curriculum alignment, but teacher motivation levels decreased.

While the majority of respondents noted that horizontal and vertical curriculum alignment was a success attributed to establishing PLCs, one participant noted that curriculum has been a challenge for teachers working with cross-district wide as not all districts utilize the same curriculum.

Theme Three: Teacher competence in common assessment development. Principals in all three focus groups agreed that the number of common formative and summative assessments have increased since the inception of PLCs. Respondents maintained a shift had occurred in some instances from a focus on summative assessments to a focus on formative assessments. The shift had included performance-based formative assessments that included strategic thinking and development of higher-order thinking in students. One principal reported, “I feel like our assessments are more performance-based. They are less based on a mastery checklist at the end of the chapter kind of thing. If we want kids to compare and contrast, they have to do a Venn diagram.”

This was substantiated with principals reporting a lower reliance on normed summative assessments such as MCAs and NWEAs, and a higher reliance of teacher created skill-based assessments. Principals acknowledged, in some instances where there was only one teacher within a content area of grade level, MCAs or NWEAs provided teachers a common ground to collaborate on regarding assessments and data.

Principals reported teacher competence of creating and administering formative assessments had increased. Responses included, “Teachers are more comfortable using assessments,” and “Teachers are more careful in how they prepare assessments.” A third

principal noted, “There doesn’t seem to be the fear anymore in assessing students...I think teachers are more and more comfortable in creating the assessments and using the assessments to the benefit of the kids.”

One reason for increased teacher competence in developing and using common assessments was attributed to the collaboration time devoted within a school schedule. Dedicated collaboration time was attributed to providing teachers time to work together which fostered an environment of a collective focus on learning. One participant stated, “I think through collaboration teachers are seeing things that might work better than how they have done it in the past so they are adjusting their teaching together as a group because they are talking about it and because they are doing it together which is helping student performance.” This statement was reflective of teachers adjusting instruction based on data that was generated from common assessments.

Theme 4: Organizational barriers. Several organizational elements were defined as posing barriers to the successful implementation of PLCs. Connecting venues identified under this overarching theme included: external stakeholders, specificity versus ambiguity, structure and time, and size. The subsequent section will discuss each as sub-themes identified from the focus group interviews.

Sub-theme 1: External stakeholders. Principals identified various stakeholder groups as barriers to establishing PLCs. Some schools were working to report to the local school board about the effectiveness of PLCs. School boards were seeking data revealing the positive or negative impacts of FLY. The principals reported that this was difficult, as many variables impacted school success. One participant cited the impossibility of knowing whether or not the PLCs were the variable that may have affected student achievement, “...We are trying to

convince our public right now (of the value of PLCs) and they keep wanting more data and we keep saying there are so many variables.”

A second stakeholder group identified as a barrier was the Minnesota Department of Education. Principals reported that the DuFour model in which the *Improving Student Achievement* Initiative schools were following, was contradictory to the directive given from the Minnesota Department of Education. One principal stated, “I am frustrated that the experts are telling us to do it one way and the state is telling us to do another way which may not be the best practice.” A second principal echoed the idea and stated,

I feel like there has been an increase in frustration...towards the state you know the summative assessments as people have learned more about the value of formative and see the importance there and how that can impact the learning. Yet, every spring we create the lab schedule due to the No Child Left Behind era and hopefully that is starting to come to an end.

Overall, principals reported that although the external stakeholder factors were not directly within their control, they still posed a barrier for schools to be able to lead their school in an effective manner.

Sub-theme 2: Specificity versus ambiguity. Principals identified the need to be clear and directive, while giving teachers ample autonomy in PLCs as a challenge. It was difficult to provide an adequate framework and appropriate level of expectations, while not being overly dictating in establishing defined expectations for PLCs. Principals agreed that overall teachers vented frustration to them, due in part to too much or lack of directives.

Participants discussed the items they were loose and tight on. Loose and tight items were areas that school leaders were either not as firm (loose), or firmer (tight) on. Principals identified

tight items as: teachers were required to submit minutes from each PLC meeting, completing quarterly reports, submitting agendas, developing school-wide expectations, setting minimum meeting times, and requiring SMART goals. SMART goals were goals that had the following characteristics: specific, measureable, agreed upon, realistic, and time-based.

Principals argued the tight items listed above, provided a framework for staff to work from. Participants reported that teachers had difficulty in determining if the work they were doing in their PLC was correct or not. Both the middle school and high school principal group noted that staff felt as though there was a lack of direction. One high school principal stated, “I think another problem is that many staff want a roadmap, and the roadmap hasn’t been laid and they are unwilling to explore new ground with the risk that is involved with change.” Principals mitigated the necessity for a roadmap for staff ascertaining that, “...I may not always have all the answers, but (we need to) re-train and tell them (teachers) it isn’t a black and white situation.” One principal noted that while some staff may felt like they want a specific roadmap, others may have found it too prescriptive, thus limiting their creativity.

Participants also articulated the need for themselves to better understanding PLC practices in order for them to more clearly define a road map and have a keener understanding of PLC direction for their teachers. “We need better practices to figure out the road map to figure out where we want to go...,” described one principal. Participants agreed that due to their magnitude of responsibilities, they didn’t thoroughly understand how to develop and lay an exemplary PLC framework for their teaching staff.

Sub-theme Three: Structure and time. One interview question asked, “What barriers are in place that impede your school’s ability to effectively establish and implement PLCs?” The most common noted response from all principal groups to this question was time. Some only

stated “time” as a response, while others elaborated. One reason that was provided by participants was that the current amount of time provided within the school system structure dedicated to PLC work was not enough. Respondents noted that generally one hour per week was dedicated to focused collaborative PLC time. One school reported that they had focused PLC meeting time two times per month. Overall, the consensus was that the current allotment of time built into the structure for PLCs to meet was not enough.

Participants connected the barrier of time to the structure in place within their school building. The consensus was that prior to the inception of the *Improving Student Achievement Initiative*, there was not dedicated time within the contractual school day to focus on PLC work. While structures changed for the majority of schools, external mandates increased difficulty to set aside time in the school day. One principal reported that by establishing built-in PLC time during the school day, they were then in violation of the state mandate requiring a minimum of student contact minutes throughout the school year. The principal reported,

...the year before we had just got the board approval to get a two hour late start one time per month, but we got rejected by the state because of the minute requirement. It was disappointing because of the minutes we have to have in school and the stuff we weren't able to do some of that stuff.

While some principals reported the difficulty in changing the structure to accommodate time built into the school day, others were quick to provide ideas of how they were able to make such adjustments. Ideas that were discussed included: early dismissal on Fridays, late start on Wednesdays, changing the focus of collaboration time that was already built-in, meeting two times per month, and utilizing additional ½ day in-service time for PLC work. The principals were eager to share ideas and provide solutions to this identified barrier.

Sub-theme 4: School size. Similar to other themes that developed from the focus groups, there were no focus group questions that specifically asked about school size. School size was identified as a barrier among the middle school and high school principal focus groups. Principals' maintaining that size was a barrier in developing common assessments and affected teachers' understanding of the PLC framework.

Difficulty in developing and implementing common assessments was the most noted item in regards to school size. Principals reported teachers were challenged, due to the fact that he or she was not able to discuss common student data if they were the only teacher who was teaching a particular subject area or grade. One principal reported, "No staff members at the high school give common assessments because they don't teach a common course, so we are trying to figure out a way to do that."

This was echoed among middle school principals who articulated the difficulty of discussing data if common assessments were not given. One middle school principal stated, "...for smaller schools when there is only one section. It is hard if there is only one chemistry teacher. It is difficult to come up with common assessments."

Participants reported that it was difficult for teachers to understand the process, as they perceived their school as appearing very different than others. The principal worked to help teachers understand that their school was unique and their approach to PLCs may indeed be different than other schools. The principal reported that his explanation made the teachers become more student focused and was a creative way to help students learn across subject fields.

Theme 2: School climate. School climate characteristics were identified as barriers for teachers to move forward willingly in the PLC process, and noted by all three focus groups. The

first school climate barrier centered around collaboration. The second was in relation to teachers supporting the principle of PLCs.

The first school climate barrier focused on teacher collaboration. All three focus groups noted this as an area of concern. One principal stated, “It is difficult when people have to work together and they don’t really want to work together. That makes their job less enjoyable.” As previously noted by the principal, teachers who disengaged from collaboration by isolating themselves in their classrooms, lack of willingness to collaborate was an evident barrier for some teachers in establishing PLCs.

One principal also noted that collaboration was more likely to happen to a higher degree for teachers in choosing with whom they worked. Initially, one school allowed teachers to self-select their PLC group. After a period of time, the administration assigned teachers to PLC groups, which meant the membership of some PLCs changed. PLCs assignments were changed so teachers were working with others in similar grade levels or content areas. This was completed so the focus of group work would increase and common assessments could be developed. The principal reported that the change in PLC groups propagated difficulties among teachers who didn’t want to work together.

A high school principal summed up his thoughts related to teacher willingness to buy-in and move forward with PLCs. He stated,

I think it is important that sometimes you need to leave people alone and at some point they will either jump on the wagon or the you will get left behind and those people that want to be successful and want to present a program of quality are going to step up to the plate and continue to grow and expand either in the curricular areas or when you talk power standards or any of the other parts of forming and begin a successful curriculum

team. I think it is critical that we don't stop doing what we are doing, just because there are a few people who don't want to do it. We need to move on and leave those people behind.

When the principals were asked what barriers they identified, one respondent replied, "I think a small percentage of staff is saying they don't believe in the principle. They don't buy it." A second principal stated, "They (teachers) want to go to their classroom, they want to sit there, they don't want to deal with the problem because they don't understand how they affect themselves in the classroom and how they affect the institution in itself." Respondents agreed that based on the progress their schools have made since the inception of PLCs, the percentage of teachers not agreeing with the principle has decreased.

In summary, successes identified included increased school focus, horizontal and vertical curriculum alignment, and increased teacher competence in developing assessments. Barriers that were identified included: organizational issues related to external stakeholders, specificity versus ambiguity, structure and time, and size. These themes will be analyzed and recommendation made in Chapter 5.

Validity and Reliability

Content-related Evidence of Validity

The quantitative survey used was a published continuum based on research from Richard and Rebecca DuFour and depicted in the book titled, *Learning by Doing*. The survey sought to discern the degree of implementation of PLCs and shifts in items related to degree of PLC execution. The information in the survey was published as a reflection tool that principals could review to determine their level of PLC implementation. This information was organized as a survey by the researcher, so participants could respond and data could be gathered. All 39

principals serving in an *Improving Student Achievement* Initiative school had the opportunity to complete the survey. Participants were familiar with terminology and themes within the survey, as all had received training on the DuFour model of PLC implementation.

Construct-related Evidence of Validity

Participants quantitatively responded to closed-ended survey questions regarding the level of implementation of PLCs. These results were generalized and findings provided a platform for the development of qualitative focus group questions. To increase construct-related validity, the themes revealed from the interviews were triangulated through document reviews.

Each school district completed an annual review of their PLC progress. Items included on the review were accomplishments, challenges, road-blocks, lingering questions, and next steps. All themes found in the qualitative analysis were mentioned at least one time in the yearly documents. Triangulation of this nature established validity of the researcher's observations by checking what was heard and seen with other sources of information (Fraenkel & Wallen, 2006).

Bias

Bias was the possibility that certain characteristics or ideas of observers may influence what they see (Fraenkel & Wallen, 2006). The researcher was employed in a school district that participated in the *Increasing Student Achievement Initiative*. The researcher was passionate about job-embedded professional development and believed DuFour's PLC model was an acceptable framework for job-embedded professional development. To mitigate any biases posed by the researcher, individual viewpoints were reflected upon and documented throughout the study.

Wave analysis, a method to check for bias, was followed. Surveys were checked to determine the responses received in week 1, 2, and 3 of the survey collection phase. If responses

changed near the end of the collection period, a bias would exist (Fraenkel & Wallen, 2006). Of the 29 responses submitted, 15 were submitted the same day the survey was sent via email. The remaining responses were submitted on: day 2 (seven responses), day 3 (one response), day 3 (one response), day 4 (one response), day 5 (two responses), day 6 (one response), day 7 (one response), and day 12 (one response). No responses were received after day 12. The day 12 respondent had an overall average of 2.9 on the Likert scale of reporting implementation shifts. This was measured against the remaining responses overall average of implementation shifts, which had an average of 3. Thus, the chance for bias was greatly reduced for survey responses.

Limitations

The survey instrument focused on shifts in professional development from Richard DuFour's perspective and published in *Learning By Doing*. By completing the survey, principals reflected on the establishment of PLCs. Their reflection was limited to the DuFour model. Schools that participated in the *Increasing Student Achievement Initiative* were following DuFour's model, thus the data gathered was relevant and comprehensible by participants. Therefore the results of this study may not be transferable to PLC work following a different model.

Summary

Principals from the 25 school districts participating in the *Increasing Student Achievement Initiative* had the opportunity to contribute to the mixed methods study that sought to identify successes and barriers in establishing PLCs from principals' perspectives. Twenty-nine principals responded to the closed ended quantitative survey and 35 participated in the focus group interviews.

The surveys asked principals to respond to five critical areas of PLC implementation. The category of shifts in fundamental purpose of PLC had the highest overall mean and lowest standards deviation. The category focused on shifts in work of teachers in school's PLCs had the second highest mean consistent with the second lowest standard deviation. Shifts in professional development and shifts in the use of assessments revealed the third and fourth highest mean and next lowest standard deviation. School culture scored the lowest mean and highest standard deviation.

Principals participated in focus group interview sessions and responded to questions that were developed, based on the survey results. Three focus group interviews were held and principals were disaggregated based on their responsibility. One focus group was comprised of elementary principals, another had a population of middle school principals, and the third had high school principals.

The interview results were recorded and transcribed verbatim. A software program, MAXQda[®], was used to code the interview transcripts. Results revealed three themes associated with successes of establishing PLCs from principals' perspectives. The success themes included: increased school focus, curriculum alignment, and teacher competence in developing common assessments. Two themes were associated with barriers in establishing PLCs from principals' perspectives. The first theme associated as a barrier was the organization. Four sub-themes were identified in this area and included: external stakeholders, specificity versus ambiguity, structure and time, and size.

Content related validity was addressed by acknowledging the survey was based on DuFour's PLC implementation levels as published in the book titled, *Learning by Doing*. Construct related validity was addressed by reviewing yearly reports submitted by each school

that participated in the *Improving Student Achievement Initiative*. The researcher mitigated by through reflecting and journaling upon thoughts associated with PLC establishment, as this area of research was part of the respective work duties within a participating school district.

Chapter 5: Implications

The purpose of the research study was to determine successes and barriers associated with establishing professional learning communities from principals' perspectives. The study included a consortium of 25 schools in southwest Minnesota who worked together and formed the *Improving Student Achievement Initiative*. The mixed methods study examined PLC implementation levels via an online survey that was sent all principals serving the 25 districts. The quantitative data were analyzed and used to develop focus group interview questions to dig deeper and gather meaning of specific successes and challenges. Three focus groups were held in which 35 principals were interviewed. Data gathered from the focus groups were analyzed and themes presented in the qualitative findings section of chapter 4. This chapter will analyze themes and provide implications for future research in this area.

The research questions asked in the study included:

1. What are the successes associated with establishing PLCs from principals' perspectives?
2. What are the barriers associated with establishing PLCs from principals' perspectives?

Findings

Chapter Four revealed three successes in establishing PLCs from principals' perspectives. The three resulting themes included: increased school focus, curriculum alignment, and increased teacher competency in developing common assessments.

Theme 1: Increased school focus as a success. There was evidence of increased focus on school initiatives. Most notably, it was reported that there was a shift from a focus on teaching to a focus on learning. This success finding was based on the focus group interviews

and was consistent with level of PLC implementation. One survey question asked respondents to rank their level of shift from a focus on teaching to a focus on learning. This category had the highest reported implementation level, or greatest shift in PLC work reported by principals. The category had an average of 2.8 on a 1-4 scale and the smallest standard deviation from all categories (0.6).

The interviews were able to identify areas of focus that were a success for PLCs related to teacher competency in developing common assessments. This aligned with the shift from summative assessments to formative assessments. By making this shift, teachers were better able to assess on an ongoing basis and build in re-teaching and cumulative review in their instruction.

The research supported increased focus and shifting from a focus on teaching to a focus on learning as an essential element in successful teaching today. The shift from a focus on teaching to a focus on learning is congruent with the National Professional Development Standards. The standards discuss that instruction and focus on student learning is a best practice for teachers (Learning Forward, 2011). This was substantiated by McLaughlin and Talbert (1993) who maintained that teachers who reported a shift in professionalism in working with today's students was a descriptor of a successful collaborative professional learning community. By pinpointing a shift of focus from teaching to a focus on learning and working to establish this element teachers will move along the implementation stage of PLCs and initiate a positive protocol in PLC processes.

Theme Two: Curriculum alignment as a success. Several principals reported during the focus group interviews that curriculums were aligned to either state or local standards since the inception of the PLCs. The establishment of essential learning outcomes was a key piece in moving PLC work forward in relation to DuFour's first and one of his four essential questions

which states, “How do we know students have learned the intended concepts/skills?” (DuFour et al., 2010). Knowing that these items are further along in the development stage, guides school leaders to be confident that teachers are progressing in the correct manner in their PLCs. It is also an indicator that a focus on curriculum alignment early in the PLC process is a necessity, as it builds a clearer understanding for teachers to be confident in knowing what they intend students should understand and be able to do.

Theme Three: Teacher competence in common assessment development. During the interviews, principals noted an increase in teacher competence in developing common assessments. The ability for teachers to develop these types of assessments was possibly due to the structured collaboration time developed by each school. The literature revealed that collaboration was the most identified essential element necessary to begin successful PLCs (DuFour, 2010; Fogarty & Pete, 2009; Newmann, 1996; Thompson, Gregg, & Niska, 2004). Having an environment where teachers continually collaborate was essential to a learning organization and to achieve intended results (DuFour & Eaker, 1998; Murphy & Lick, 2005). Teachers would not have been able to develop common assessments together if the structure and time were not provided for them. Indirectly, one can conclude that collaboration was an indicator of success, as it allowed teachers to work together and build competency in formative assessment development.

During the survey data collection process, principals were asked to rank their school in a shift from privatization to open sharing of practice. The overall response rate on a scale of 1-4 was 2.9 with a standard deviation of 0.7. This indicated a higher degree of implementation in PLCs than some of the other areas. This data substantiated the interview findings, as it was a success theme that was derived.

Principals should be commended for developing collaborative groups for all teachers to participate in PLCs, as it has helped them move towards a constructivist approach to professional development. The value of collaborative time should be shared with external stakeholders to make them aware of this research supported practice and gain their continued support for teachers working together to learn and grow professionally.

Theme 4: Organization as a barrier. Organization was found to be the largest barrier with several sub-topics categorized within. Sub-category themed areas derived under the organizational heading included: stakeholders, specificity versus ambiguity, structure and time, and school size.

Stakeholder barriers were noted as school boards and the Minnesota Department of Education. Principals reported that it was difficult to singularly show that PLCs are impacting the school. They also reported that once learning about best practice in professional development had occurred, they were now aware that summative assessments and state standardized testing does not align with the research. Principals may have limited influence on school boards and state and federal legislation, thus a clear organizational vision is needed by Superintendents.

Senge (1990) articulated the importance of having a shared vision and assimilated it with a rudder of a boat; the mechanism to keep an organization on course. The vision articulated the purpose for an organizations existence and values upon which the organization was founded (Hirsh & Hord, 2008). A shared vision in a learning community fostered successful norms of behavior focused on student learning and was necessary for an effective organization (DuFour & Eaker, 1998; Hord, 1997). It is important for superintendents to advocate a shared vision to external stakeholder groups the purpose and intentions of professional learning communities, along with any results that can be attributed to them.

A lack of clear direction of how to move forward in PLC work was a barrier identified by principals. The majority discussed teacher frustration with wondering whether they were doing things “right” and what the next steps were. Principals articulated the importance of setting in place the framework for teachers, but they also did not want to be too prescriptive. Principals shared items they were loose and tight on with teachers.

A continued reflection of building and district-wide expectation is necessary for principals to keep a clear vision of their expectations of PLCs. Principals should continue to discuss the PLC framework as a best practice of professional development and continue act as a guide and leader for their teachers. These elements will continue to build capacity within their teaching staff of understanding the framework, while providing autonomy to navigate the framework in a manner that fits their situation.

When participants were asked to identify a barrier in establishing PLCs, time and structure were most identified. Principals reported that prior to the inception of PLCs, focused collaborative time was not structurally built into the contractual school day. All schools report that time is now built into the school day, but note there is still not enough of it. Structured time for staff to collaborate together is essential (Louis, 1992) and is influenced by a principal (Hirsh & Hord, 2008; Wahlstrom & Louis, 2008). Principals should continue to consider alternatives for focused collaborative time to be increased among their staff.

Theme Five: School climate as a barrier. Principals reported that some teachers do not buy into the principle of PLCs. They also reported that if teachers who don’t get along are placed in the same PLC, collaboration and focused work was impeded. These elements were directly connected to school climate. This literature revealed that teachers’ willingness to collaborate in a collegial manner was influenced by school climate (Barth, 2006; Lindahl, 2009). Climate affects

teacher relationships and impacts student learning (Roeser, Eccles, & Sameroff, 1998).

Principals' leadership styles directly impact school climate and has particular influence in the areas of relationships and trust. The knowledge of principal's connection and influence on school climate can aid principals in reflecting and making decisions that will advance a positive climate in their school.

Recommendations

Based on the themes generated through the qualitative focus group interviews, the researcher recommends the following for recommendations:

1. Identify a viable plan for individuals teaching singleton content areas or grades.

This recommendation is based on the following:

Size was determined as a barrier. It is difficult for teachers to develop common assessments if they are the only person teaching a subject or grade level. The current *Increasing Student Achievement Initiative* currently provides this option through cross-district PLCs. Many teachers participate in these and then are able to develop common formative assessments. However, there are some schools with singleton teachers that don't participate in cross-district PLCs. The cross-district PLC infrastructure should be reviewed to ensure it aligns with best-practices of job-embedded on going professional development. Currently, the structure provides four face-to-face meeting opportunities for the individuals. Consider a model that brings teachers together on a more frequent basis, either virtually or in-person.

One commonality that should be considered for a venue of singleton teachers to successfully implement a PLC, is to find a commonality that all teachers across subjects or grades agree to focus on. For example, Common Core Literacy Standards are a focus for multiple grade levels. Another example is to focus on writing or reading in all courses. Teachers can identify

commonalities and overlaps in separate content curriculum such as standard units of measurement or the scientific method.

The consortium can work together to develop common curriculum. It was noted among respondents that it was difficult for singleton teachers who meet with other districts to develop assessments due to different curriculum. These areas should explore the potential of developing a common curriculum across *Increasing Student Achievement Initiative* schools.

2. Build capacity among school leaders.

Building capacity among school leaders, primarily principals, will provide them with the necessary tools and skills to best position their schools as they move forward with PLCs. Specific areas to focus on include: working with external stakeholders, better understanding the PLC process, increasing school climate, and continuing to develop the philosophy of what should be loose and what should be tight. This will help principals develop into more competent school leaders in the PLC and professional development area. Increasing capacity among school leaders will help them address continued barriers identified in their school and have them capitalize and continue to celebrate the successes for their school.

Future Research

The researcher recommends two additional areas of future research that have potential to benefit the school participating in the *Improving Student Achievement Initiative* and other schools incepting PLCs.

1. Consider a study that examines virtual or geographically isolated networks of PLCs.

Identifying essential components to make such groups successful will help inform the consortium and provide an adequate framework to help teachers in these areas.

2. Consider a study that identifies essential principal characteristics that are necessary to establish and sustain successful PLCs. The current study asked participants to identify successes and barriers, but did not consider individual leadership styles and its potential influence on successes and barriers.

Summary

In summary, this paper studied the successes and challenges of incepting PLCs from principals' perspectives. Principals responded to a closed ended survey and participated in qualitative focus groups. Data was analyzed and successes were identified in the areas of increased focus, curriculum alignment, and teacher competence. Barriers were identified in the areas of organization (stakeholders, direction, and time and support) and school climate.

Recommendation that were generated included: evaluating the current PLC process for teachers in singleton areas and building administrators' capacities. Future areas of research include studying professional development practices for teachers in singleton areas and investigating leadership styles associated with successful PLCs.

The findings from this study will benefit teachers and school leaders within the *Improving Student Achievement Initiative* and additional school leaders who are in the establishment phase of PLCs.

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Appendix A

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Improving Student Achievement Initiative

Flexible Learning Year Application

District Name: Worthington

District Number: 518

School or Program Name: Improving Student Achievement Initiative

Application/Revision Date: February 5, 2010

Date Received: _____

124D.12 Application must include a description of the type of flexible learning year program that the district wishes to implement.

45-15, flexible all year, 4-quarters, 4-day week, quinmester, other-specify: extended learning year

Twenty-five (25) schools in Southwest Minnesota, with a total combined student population of **16,153** students and **1,380** staff, have joined together in order to respectfully request permission from the Commissioner of Education to implement a program called the *"Improving Student Achievement Initiative."*

This request is for the category of "other-specify":

In joint cooperation (MS 120.40), and in order to *"suitably fulfill the educational needs of [our] pupils"* (MS 124D.12), we are requesting that the Commissioner of the Minnesota Department of Education, under Minnesota Rule 3500.1000, grant permission to implement a flexible learning year program for the 2010-11, 2011-12 and 2012-13 school years,

The first day of school for the 2010-11 school year is set for Monday, August 23, 2010.

The first day of school for the 2011-12 school year is set for Monday, August 22, 2011.

The first day of school for the 2012-13 school year is set for Monday, August 20, 2012.

Each school district will create a custom district calendar within the parameters of a "common calendar."

124D.123 Application describes whether the program is for a single school or district-wide.

This application is a “district-wide program” for each individual district. It is submitted in cooperation with a Consortium of 25 school districts including active participation from the SW/WC Service Cooperative located in Marshall, Minnesota. The proposal is designed to improve student achievement for 16,153 students in southwest Minnesota.

Each school district will submit an individual application.

Consortium schools participating for THREE YEARS (2010-11, 2011-12, 2012-13) include:

District #	Name	Students	Staff
1. 0511-01	ADRIAN	617	46
2. 0513-01	BREWSTER	141	11
3. 0891-01	CANBY	522	47
4. 0081-01	COMFREY	147	19
5. 0581-01	EDGERTON	308	32
6. 0402-01	HENDRICKS	166	13
7. 0671-01	HILLS-BEAVER CREEK	328	28
8. 0403-01	IVANHOE	151	15
9. 2895-01	JACKSON COUNTY CENTRAL	1,128	84
10. 2167-01	LAKEVIEW	572	47
11. 2184-01	LUVERNE	1,200	99
12. 0415-01	LYND	126	16
13. 0413-01	MARSHALL	2,170	175
14. 0635-01	MILROY	35	5
15. 0414-01	MINNEOTA	447	39
16. 0173-01	MOUNTAIN LAKE	472	48
17. 2897-01	REDWOOD AREA	1,233	102
18. 0516-01	ROUND LAKE	121	11
19. 2902-01	RTR	553	50
20. 0084-01	SLEEPY EYE	611	57
21. 0085-01	SPRINGFIELD	588	47
22. 2904-01	TRACY AREA	758	64
	TRACY AREA (BALATON)	54	5
23. 2898-01	WESTBROOK-WALNUT GROVE	548	49
24. 0177-01	WINDOM	886	81
25. 0518-01	WORTHINGTON	2,271	190
	Totals	16,153	1,380

- Source: MDE School Report Card (all licensed professionals) October 1, 2008

3500.1000 subp.1 Application describes how it will accomplish at least one of the following:

- A. improve instructional quality;
- B. increase cost effectiveness;
- C. make better use of community resources or available technology
- D. establish an alternative eligibility criteria intended to identify pupils in need of special education services.

The application is targeted to accomplish item “A. improve instructional quality.”

PART ONE – Research & Improving Instructional Quality

Research Based Hypothesis

Consortium schools hypothesize that within three years, student achievement will increase as a result of quality instructional time added in advance of assessments.

The Consortium defines *instructional time* as instructional days and minutes added to the school calendar *in advance of state and national assessments*.

A. Time for Academic Success

Consortium schools have reviewed research related to how adding time affects student performance. Although the primary research is nearly two decades old, consortium schools are convinced that the findings are valid and can be generalize to anchor this proposal.

Consortium schools are persuaded by validity of research demonstrating the positive effects that additional instructional time has on learning (Berliner, 1990).

Consortium schools add time to learning by shifting instructional days that occur after assessments and placing them in advance of assessments.

Consortium schools are convinced by research which indicates that *additional days* must have an *academic purpose*. Added time must be more than mere *time allocated* to the beginning of the school year. Added time must be filled with activities designed to improve student achievement (Berliner, 1990). Effective instructional days and hours (learning) are defined as “*time on task*” where the student is “*behaviorally oriented to the teacher or task*” (Gettinger, 1985). Spending less instructional time than is needed negatively affects students in two ways: 1) a *lower degree of learning*, and 2) a *lower retention rate* (Gettinger, 1985).

B. Training for Academic Success

Consortium schools are convinced by research showing that the *effective use* of the additional time *by teachers* is critical to increasing student achievement. Research indicates that teachers who are good at the *management of instructional time*, the *control of attention*, and the *alignment of curriculum contents* with the desired outcomes of *instruction increase performance on standardized test scores* (Berliner, 1990). Consortium schools believe that research demonstrates the critical need for high quality, effective, intentional and focused staff development activities designed to help teachers make the most of instructional time (Berliner, 1990).

The Consortium is convinced that research authenticates both the Minnesota Staff Development Standards and the National Staff Development Council Standards as effective models of professional development leading to academic success for students. “Professional development” is defined as a comprehensive, sustained, and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement.

PART TWO – Strategies & Improving Instructional Quality

A. Time for Academic Success

General Days Devoted to Academic Success: This application maximizes “general” instructional days to benefit students. It adds *days in advance of critical state and national assessments*.

No other calendar options are currently available to schools whereby days can be added prior to these assessments since nearly all breaks are fixed by state law, contractual agreements or past practice. Adding days to the beginning of the school year, rather than at the end of the school year is consistent with our desire to capture “high impact instructional time” and prepare students for success. The Consortium views “high impact instructional time” as time that students have a high degree of motivation to attend school and engage in school activities. Again, the consortium believes that motivation is greater in the fall than in the spring.

Optional Programmed Days Devoted to Academic Success: This application maximizes “programmed” instructional days to benefit students. Programmed days are suited to meet individual school districts within the Consortium desiring to devote time to meet the unique needs of students.

Two examples of Programmed Days include:

- 1) **Eclectic Sessions within the Calendar Year:** This proposal adds seven to ten days between the start of school and the state assessment calendar whereby schools may have the opportunity to devote concentrated time to meet the eclectic needs of students such as: 1) prepare for state assessments, 2) facilitate participation in academic enrichment and remediation programs, and/or 3) exposure to unique and advanced academic programs.
- 2) **Extended School Year:** This proposal allows Consortium schools to create an extended school year to meet the needs of students not meeting academic standards. Extended school year programs may start when school ends in the middle of May and last until the end of May or early June as individually determined by each district. Consortium schools believe that the extended school year options maximize student motivation and learning opportunities.

Increasing Instructional Time: The generalized chart below, based on 175 instructional days, shows how adding 10 instructional days to the Common Calendar impacts instructional time in advance of high stakes state and national tests.

Various MCA testing windows are scheduled to BEGIN between November 2 and April 26.

Test	Date	Percent Increase in Instructional Time
ACT	September 11, 2010	+ 250
ACT	October 23, 2011	+ 31
GRAD Writing Retest Grades 10-12	November 2, 2010	+ 26
GRAD Writing Retest Grades 10-12 (Make-up)	November 9, 2010	+ 23
ACT	December 11, 2010	+ 16
ACT	February 12, 2011	+ 10
ELL Testing Begins	March 7, 2011	+ 9
ELL Testing Ends	March 25, 2011	+ 8
MTAS Reading, Math, & Science Begins	March 28, 2011	+ 8
MCA Modified Mathematics Begins	March 28, 2011	+ 8
MCA Modified Reading Begins	March 28, 2011	+ 8
MCA Science Testing Begins	March 28, 2011	+ 8
ACT	April 9, 2011	+ 7
MCA Paper and Pencil Reading & Math Gr 3-8 Begins	April 11, 2011	+ 7
MCA Modified Reading Grades 5-8 Begins	April 11, 2011	+ 7
MCA Paper and Pencil Reading & Math Gr 10 & 11: Seg. 1 & 2	April 12, 2011	+ 7
MCA Modified Paper and Pencil Reading & Math Gr 10 & 11: Seg. 1 & 2	April 12, 2011	+ 7
GRAD Writing Grade 9	April 12, 2011	+ 7
MCA Paper and Pencil Reading & Math Grades 10 & 11: Seg. 3 & 4	April 13, 2011	+ 7
MCA Modified Paper and Pencil Reading & Math Grades 10 & 11: Seg. 3 & 4	April 13, 2011	+ 7
GRAD Writing Retest (Seniors Only)	April 19, 2011	+ 7
GRAD Writing Grade 9 (Make-up)	April 19, 2011	+ 7
GRAD Writing Retest (Seniors Only) (Make-up)	April 26, 2011	+ 7
ACT	May 2, 2011	+ 6
AP Tests Begin May 2-13	May 2, 2011	+ 6

Various MCA testing windows are scheduled to END between April 29 and May 20.

MCA Paper & Pencil Reading & Math Reading Ends	April 29, 2011
MTAS Reading & Math Ends	April 29, 2011
MCA Modified Math Ends	April 29, 2011
MCA Modified Reading Ends	April 29, 2011
MCA Grades 3-8 Online Mathematics Ends	May 20, 2011
MCA Science Ends	May 20, 2011
MTAS Science Ends	May 20, 2011
GRAD Writing Retest	July 19, 2011
GRAD Writing Retest (make-up)	July 20, 2011

Achievement Centered Semester Break: Interruptions in the learning process negatively impact the learning process. Current school calendars interrupt the school curriculum learning process (second quarter / first semester) by a seven to ten day winter (holiday) break. This interruption negatively impacts the learning and often requires lesson review.

The proposed calendar schedules the first semester to end prior to the December holiday break with the second semester beginning after the holiday break. This eliminates the 7 to 10 day interruption and creates an uninterrupted semester with no unit interruption.

Achievement Centered Motivation: Adding seven to ten days in advance of critical state and national assessments increases student motivation in three ways.

First, student motivation increases when students have ample time to learn and practice for assessments. Scheduling an additional seven to ten days in advance of these assessments allows this to happen.

Second, student motivation increases when students improve their performance on assessments. Seven to ten additional days scheduled in advance of these assessments allows this to happen.

Third, anecdotal evidence leads us to conclude that student motivation for academic achievement decreases after the state assessments are completed (late April to mid May) leaving students less inclined to attend to schoolwork. Removing seven to ten days after state assessments and scheduling these days in advance of these assessments is a more effective use of time and maximizes student motivation.

B. Training for Academic Success

Achievement Centered Staff Development: Currently, no common calendar exists among schools in southwest Minnesota. With the creation of the Consortium, common staff development activities can be created and designed to increase student achievement.

The Consortium believes that adding more time to the calendar in advance of assessments without addressing *how teachers use that time* only solves part of the student performance equation. Therefore, this application not only creates a common calendar; it *mandates coordinated staff development activities* among Consortium schools, *within the framework of that common calendar*. These coordinated activities are designed to equip teachers, paraprofessionals, and administrative staff with ideas and methods to *improve instructional quality* resulting in increased student learning.

Increasing Achievement Through the Use of Limited Resources: Present state and local school economies limit resources critical to improving teacher effectiveness and student learning. This application creates opportunities designed to maximize these dwindling resources. Consortium schools are required to pool professional expertise presently existing in our Consortium schools, and financial resources, in order to provide focused, effective and high-quality professional development opportunities.

3500.1000 subp.3 Application includes the goals and objectives of the program and the activities used to accomplish the objectives.

ACTIVITY #1 – PROGRAMMED DAYS: Schedule “programmed days” devoted to increasing student achievement.

Goals & Objective: These days are suited to meet the needs of individual school districts within the Consortium that plan to set aside time to meet the unique needs of students. Schools within the Consortium can choose among activities tailored to meet district needs.

Activity A: Some Consortium schools may plan to devote seven to ten days of concentrated time to meet the individual needs of students in order to 1) prepare for assessments, 2) facilitate participation in academic enrichment and remediation programs, 3) exposure to unique and advanced academic programs, and/or 4) meet academic standards.

Activity B: Some Consortium schools may plan to extend the school year to meet the needs of students not meeting academic standards. Extended school year programs may start when school ends in the middle of May and last until the end of May or early June as individually determined by each district. Consortium schools believe that the extended school year options maximize student motivation and learning opportunities.

ACTIVITY #2: GENERAL STAFF DEVELOPMENT: Implement staff development activities designed to increase student achievement.

Goals & Objective: A premise of this application is that successful schools impact student achievement through powerful, deliberate and consequential teacher development.

The Consortium believes that the purpose statement of the National Staff Development Council clearly identifies the critical role that staff development plays in student achievement.

*“Every educator engages in effective professional learning
every day so
every student achieves.”*

Therefore, the Consortium is committed to high quality professional development, grounded in the best practice activities as defined by the Minnesota Department of Education and the National Staff Development Council.

The Consortium will create activities that benefit teachers and ultimately the students under their care. Activities will be data driven, evaluative, research-based, focused on best practice, student-centric, motivational and collaborative. Activities will also give teachers the opportunities to become instructional leaders.

A general description of the trainings includes:

1. Disaggregate student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement processes. (Data Driven)

2. Use multiple sources of information to guide improvement and professional practice and demonstrate the impact of these information sources to demonstrate impact. (Evaluation)
3. Prepare educators to apply research to make instructional decisions. (Research-based)
4. Use learning strategies appropriate to the intended goal. (Design/Best Practice)
5. Apply knowledge about human learning and improvement. (Learning)
6. Provide educators with the knowledge, time, and skills to collaborate. (Collaboration)
7. Require skillful school and district leaders who guide continuous instructional and organizational improvement. (Leadership)

Activity A: District staff development coordinators and/or a representative from each school district will meet to schedule and plan common professional development activities for teachers, paraprofessionals and administrators that are consistent with best practice standards as defined by the National Staff Development Council.

Activity B: Five days will be set aside to conduct common staff development activities--three full days and two early release days. These will be used for staff activities within the district and among Consortium districts.

The three full days in the 2010-2011 calendar are:

Wednesday	August 18, 2010
Monday	January 17, 2011
Monday	March 14, 2011

The two "early out" days in the 2010-2011 calendar are:

Wednesday	October 20, 2010
Friday	February 18, 2011

Note: The staff development days for Year 2 (2011-12) and Year 3 (2012-13) will be determined at a later date.

ACTIVITY #3 – COMMON CALENDAR: Create a school calendar designed to increase student achievement.

Goals & Objective: Add days in advance of state and national assessments and improve the scheduling of holiday interruptions in order to increase student performance on high stakes assessments.

Activity A: Create a common Consortium school calendar that adds school days and hours in advance of state and national tests:

For the 2010-11 school year, the first day of school will be Monday, August 23, 2010, instead of the mandated start date currently set for Tuesday, September 6, 2010.

For the 2011-12 school year, the first day of school will be Monday, August 22, 2011, instead of the mandated start date currently set for Tuesday, September 5, 2011.

For the 2012-13 school year, the first day of school will be Monday, August 20, 2012, instead of the mandated start date currently set for Tuesday, September 3, 2012.

Activity B: Create a common Consortium school calendar that eliminates the traditional December holiday interruption of first semester (2nd quarter) learning.

For the 2010-13 school years, the last student day before the winter holiday will be December 22nd or December 23rd.

ACTIVITY #4 – PROFESSIONAL LEARNING COMMUNITIES: Create professional learning communities (PLCs) designed to increase student achievement.

Goals & Objective: Develop, implement, and deploy a common framework across districts to institute PLCs by applying the DuFour model for professional development.

The NSDC recognizes that educators benefit from participation in regional or national school reform consortia that connect schools with common interests. Consortia (PLCs) may be organized as virtual networks, face to face meetings or a combination of both. The Consortium believes that these networks will become vital sources of professional information and knowledge. In addition, it is believed that PLCs will provide essential interpersonal support and accountability in order to ensure that change actually occurs and is sustained over time. (www.nsd.org/standards/learningcommunities.cfm) – accessed 11/4/09

This is an essential component for applying the professional learning community model within and across the participating districts.

The PLCs will operate with an ongoing commitment to continuous improvement through experimentation and engagement of the members to improve daily practice to advance student achievement and meet school district goals and individual goals for student learning.

Activity: PLCs will meet during the school year to exchange 1) successful instructional and assessment strategies, and 2) relevant knowledge (data) about learning, learners and student achievement.

The Consortium supports the following findings by the NSDC that are essential components for applying professional learning communities with and across districts.

The Consortium believes that educators benefit from participation in regional or national school reform consortia that connect schools with common interests.

Consortium PLCs may utilize technology to create “virtual networks” that will allow staffs to meet.

Source: (www.nsd.org/standards/learningcommunities.cfm)

Year One: Develop and begin implementation of the PLC structure among all 25 districts.

Year Two: PLCs will meet at least 3 times during the school year.

Year Three: PLCs will meet at least 5 times during the school year.

CTIVITY #5 - TEACHER INDUCTION PROGRAM: Implement teacher induction activities signed to increase student achievement.

Goals & Objective: Consortium schools believe student achievement is increased through effective teacher induction programs.

Consortium schools will identify content specific mentors within each school and among participating school districts.

This model of induction will provide participating districts with the support to provide ongoing formative coaching and observations to support a new teachers' development and will be utilized to improve instruction.

Ultimately, this induction model, which will include established and trained mentors, will be linked to the standards of effective practice (see MDE mentoring models) in order to help new teachers grow and provide effective instruction.

This induction model will create a network of teachers that may draw teachers from isolation, providing a community of reflection, personal support, learning, and collaboration. This induction model will provide new teacher support, through inter-district and/or intra-district approach.

CTIVITY #6 - POST SECONDARY CONNECTIONS: Create college and university connections, relationships and partnerships resulting in invitations to participate and plan Consortium activities designed to improve teacher effectiveness and student achievement.

Consortium students' educational needs will be served as K-12 schedules are aligned with area post-secondary institutions. All of our schools have university contracts for student teachers to be placed in our school districts and the current calendar makes this more difficult. In addition, practicum experiences for the college students will be better aligned.

Currently, Minnesota Statute sets the school start date as September 7, 2010, or later. The start date for area post-secondary schools in the area is August 23 or 24, 2010. A start date that is common to post-secondary consortium schools enables us to align the schedules and programs of K-12 and post-secondary schools to better meet the needs of students in both institutions. This will also facilitate collaborative opportunities between the university staff and K-12 staff in each of the consortium schools. (The STEM grant currently has college professors working with our staff in the area of mathematics.)

The current 2010-11 start date for Consortium schools is set for
Monday, August 23, 2010

The current 2010-11 start date for area post-secondary institutions are:

Minnesota State University Mankato - Start Date: August 23, 2010
Minnesota West Community Colleges (All campuses) - Start Date: August 23, 2010
Southwest Minnesota State University (Marshall) - Start Date: August 23, 2010
Bethany Lutheran College (Mankato) - Start Date: August 24, 2010
South Central Community College (Mankato) - Start Date: August 24, 2010

Goals & Objective: Consortium schools believe student achievement is increased through cooperative connections with area colleges and university personnel.

Consortium schools will create opportunities for connections to be established with area colleges and universities that increase teachers' instructional effectiveness.

Consortium schools will create opportunities for connections to be established with area colleges and universities that increase student performance.

124D.12 Application must show that it will suitably fulfill the educational needs of its pupils.

- A. A calendar(s) is provided and shows that the proposal provides at least as many instructional hours as were provided in the prior school year for every school, i.e., elementary, middle and high school.**

No participating school district will reduce its instructional hours or days under this proposal. Each superintendent has certified on a separate assurance page that this proposal does not decrease instructional time (minutes, hours or days). See Appendix D—Assurance Statement on Instructional Time. Each district will provide a more detailed report on instructional minutes if requested.

- B. A description, including any research, of the instructional impact of the program.**
See Appendix A – Description of Research

124D.123 If not district-wide, application describes how students and siblings will be assigned to program. Siblings assigned to same schedule unless parents request otherwise:

Students will be assigned to classrooms in a manner consistent with prior school years.

3500.1000 subp. 4 If the program is not district-wide, the application must describe how parents of students with an IEP shall have the opportunity to approve or disapprove placement in the program.

The flexible learning year proposal does not change the educational opportunities offered to students with an IEP.

Nevertheless, students with an IEP will have an opportunity along with the rest of the students in the school district to comment on the effectiveness of the program.

3500.1000 subp. 3 Application includes specific state rules from which the district requests exemption, if any.

The proposal does not request an exemption or modification of any rule established by the Minnesota Department of Education.

124D.124 District has conducted, at a minimum, three community meetings with published notice to the teachers, employees, and parents of pupils affected.

See Appendix E – Community Meeting Unified Report Form

124D.125 If not district-wide, application includes description of how teachers were assigned to the program.

Teacher assignments will not change under this proposal.

3500.1000 subp. 3 Application includes a definite time limit which may not exceed three years.

The application request is for THREE years.

Year 1 – 2010-2011

Year 2 – 2011-2012

Year 3 – 2012-2013

3500.1000 subp. 3 Application includes the evaluation procedures to be used.

SUMMARY of Evaluation Procedures: The Consortium of school districts will collect the following data from each individual district to determine the effects of the program. A master report will be created and submitted to MDE on or before August 15 to report the findings for each year.

The 2010-11 results are due August 15, 2011.

The 2011-12 results are due August 15, 2012.

The 2012-13 results are due August 15, 2013.

Consortium schools are aware of MDE's desire to have a report submitted to MDE by July 1 of each year. The Consortium believes that August 15 is a more realistic due date and aligns with the release of district performance data to the public.

PERFORMANCE GOALS, INDICATORS AND TARGETS

1.0 PROGRAM SUPPORT (Teachers, Parents & Students)

1.1 Performance Goal: Teachers, parents and students will indicate a high level of support for the program's overall academic benefits for students.

1.2 Performance Indicators: The Consortium will measure performance over time by administering a perception survey to teachers, parents and students in the spring of 2011, 2012 and 2013. Low, moderate and high support for the program will be measure on a 3 or 5 point scale. The results will be annually reported to MDE.

1.3 Performance Target: By the end of the 2013 school year, the percentage of teachers, students and parents who report a high level of support for the program will be 90%.

2.0 ACADEMIC PERFORMANCE (Reading & Mathematics)

Margaret Biggerstaff provided WebEx training and resources to 22 Consortium districts on goal setting on January 8, 2010. She also helped set reasonable Consortium goals.

2.1 Performance Goal: Students in all Consortium schools will reach high academic standards in reading and mathematics.

2.2 Performance Indicators: The Consortium will measure performance over time by the following:

- **Baseline Data** - District-wide baseline data for the 2008-09 school year will be created for each individual school district. See Appendix C—Individual District Target Goals Worksheet
- **Annual District Target Goals** - Each individual school district will create annual (SY11, SY12, SY13) district-wide reading and mathematics target goals for the following measures for reading and math index rates. Adequate yearly progress is calculated based on our index rates. After we receive our 2010 results, we will revisit the goals set in this application. Districts will annually report its baseline and adjusted TARGET GOALS and its PROGRESS toward reaching each target goal. See Appendix C—Individual District Target Goals Worksheet
- **Consortium Target Goals** - In addition to the individual school district reports, annual Consortium-wide target goals will be created for the following measures for reading and math index rates. The Consortium will annually reports its baseline and adjusted TARGET GOALS and its PROGRESS toward reaching target goals. See Appendix I—Consortium Target Goals Worksheet

2.3 Performance Targets: Reading and mathematics target goals will be created for the following:

AYP Index Rates: The AYP index rates in reading and mathematics on the Minnesota State Assessments (MCA-II/MTELL/MTAS) for all students will increase from the Spring 2010 to Spring 2013 school year. (The MTELL will be discontinued after the 2010 school year). Goals for each district are found in the Appendix C—Individual District Target Goals Worksheet.

Example: Reading

District Number	District Name	# Oct 1 Valid Scores	# of Index Points	Index Rate	Goal Index Rate for 2010	Goals Index Rate for 2011	Goal Index Rate for 2012	Goal Index Rate for 2013
OS11	Adrian	297	245.5	82.66	85.66	88.66	91.66	94.66

3.0 WRITTEN COMPOSITION PERFORMANCE

3.1 Performance Goal: Students in all Consortium schools will reach high academic standards in written composition.

3.2 Performance Indicators: Consortium will measure performance over time by annually administering state assessments. After we receive our 2010 results, we will revisit the goals set in this application. In each Consortium school district, the percent of students proficient on the Grad Test of Written Composition will be reported to MDE by August 15.

3.3 Performance Target: The percentage of students proficient on the Grad Test of Written Composition (9th grade students only) will increase from spring 2010 to spring 2013 in the Consortium schools. Goals for each district are found in the Appendix C—Individual District Target Goals Worksheet

4.0 AMERICAN COLLEGE TEST PERFORMANCE

4.1 Performance Goal: Students in all Consortium schools will reach high academic standards in all schools.

4.2 Performance Indicators: The Consortium will monitor performance over time by annually administering national assessments. In each Consortium school district, the composite score on the American College Test (ACT) for all students will be reported to MDE by August 15.

4.3 Performance Target: The composite score on the American College Test (ACT) will be monitored from 2010 to 2013 for the Consortium schools. Baseline data is found in Appendix C—Individual District Target Goals Worksheet.

5.0 TEACHER QUALITY & EFFECTIVENESS

5.1 Staff Development Perception

1 Performance Goal: Teachers and administrators will indicate a high level of support for the program's staff development activities.

2 Performance Indicators: The Consortium will measure performance over time by administering a perception survey to teachers and administrators in the spring of 2011, 2012 and 2013. Low, moderate and high support for the staff development activities will be measure on a 3 or 5 point scale. The results will be annually reported to MDE by August 15.

3 Performance Target: By the end of the 2013 school year the teachers and administrators that report a high level of support for the program's staff development activities will be 90%.

5.2 Staff Development Activities

1 Performance Goal: All Consortium students will receive instruction and support from teachers, paraprofessionals and administrators trained in methods designed to increase student achievement.

2 Performance Indicators: The Consortium will measure performance over time by annually reporting the staff development activities conducted to increase student performance with a brief description of: 1) the activity, 2) the flexible learning year goal(s) it addresses, and 3) the anticipated impact on student achievement, and 4) the percentage of teacher, paraprofessionals, and administrator participants. The results will be annually reported to MDE by August 15.

3 Performance Target: By the end of the 2013 school year the percentage of teachers, paraprofessionals and administrators who participate in the scheduled staff development activities will be 100%.

5.3 Teacher Induction Programs

1 Performance Goal: All Consortium students will receive instruction and support from teachers and administrators trained in methods designed to increase student performance.

2 Performance Indicators: The Consortium will measure performance over time by annually reporting the teacher induction activities conducted to increase student performance with a brief description of: 1) the activity, 2) the flexible learning year goal(s) it addresses, 3) the anticipated impact on student achievement, and 4) the percentage of teacher and administrator participants. The results will be annually reported to MDE by August 15.

3 Performance Target: By the end of the 2013 school year the percentage of Consortium schools that have a teacher induction program will be 100%.

5.4 Professional Learning Communities (PLCs)

1 Performance Goal: All Consortium students will receive instruction and support from teachers who have a common understanding of PLCs, and participate in PLCs designed to increase student performance.

2 Performance Indicators: The Consortium will measure performance of this goal over time by annually reporting: 1) training activities designed to create a common understanding of PLCs, 2) the number of PLCs created across the Consortium both inter-between, and intra-

within district PLCs, 3) the number of *times* the individual PLCs met, and 4) the percentage of *teachers participating* in PLCs. The results will be annually reported to MDE by August 15.

3 Performance Target: By the end of the 2013 school year 100 % of the Consortium teachers will participate in PLCs, and the PLCs will meet for 100% of the scheduled times.

6.0 HIGHER EDUCATION CONNECTIONS

6.1 Performance Goal: All Consortium students will receive instruction, designed to increase student performance, from districts that have created connections with area higher education institutions created to improve teacher quality and effectiveness for both pre-service teachers and teacher practitioners.

6.2 Performance Indicators: The Consortium will measure performance of this goal over time by annually reporting the number of pre-service placements, activities, and teacher-training partnerships created with areas colleges and universities. The results will be annually reported to MDE by August 15.

6.3 Performance Target: By the end of the 2013 school year the Consortium will have established a partnership with one (1) area college and/or university.

3500.1000 subp. 4 Application provides evidence that district staff, pupils and parents who would be affected will participate in the annual review of the program.

SUMMARY of Evaluation Procedures (Annual Review): The Consortium of school districts plans to collect the following data from each individual district to determine the effects of the program. A master report will be created and submitted to MDE on or before August 15 to report the findings for each year.

The 2010-11 results are due August 15, 2011.

The 2011-12 results are due August 15, 2012.

The 2012-13 results are due August 15, 2013.

3500.1000 subp. 4 Application includes board minutes at which the program was approved and signed by the board chair.

Date approved:

See Appendix F—School Board Minutes Excerpt/School Board Resolution

Assurances have been checked and signed by all who are required:

See Appendix G—Flexible Learning Year Assurances of Compliance

Appendix B

John Landgaard
Superintendent

David Skog
Director of Management Services



1117 Marine Avenue
Worthington, MN 56187

Phone 507-372-2172
Fax 507-372-2174

November 23, 2013

To whom it may concern:

Katie Clarke has requested permission to send an online survey to principals participating in the *Increasing Student Achievement Initiative*. She has also requested to interview principals in focus groups. Permission is granted for her to complete this work and use the data generated from both collections for the purpose of her dissertation, in partial fulfillment of the Doctorate of Education degree. Please contact me with any questions at 507-372-2172.

Sincerely,

A handwritten signature in black ink, appearing to read "John Landgaard", written over a horizontal line.

John Landgaard,
Superintendent of Schools
Worthington School District 518

Appendix C



February 10, 2014

Dear Candace Raskin, Ed.D:

Re: IRB Proposal entitled "[482409-3] Examining Successes and Barriers in Establishing Professional Learning Communities"
Review Level: Level [I]

Your IRB Proposal has been approved as of February 10, 2014. On behalf of the Minnesota State University, Mankato IRB, I wish you success with your study. Remember that you must seek approval for any changes in your study, its design, funding source, consent process, or any part of the study that may affect participants in the study. Should any of the participants in your study suffer a research-related injury or other harmful outcome, you are required to report them to the IRB as soon as possible.

When you complete your data collection or should you discontinue your study, you must notify the IRB. Please include your log number with any correspondence with the IRB.

This approval is considered final when the full IRB approves the monthly decisions and active log. The IRB reserves the right to review each study as part of its continuing review process. Continuing reviews are usually scheduled. However, under some conditions the IRB may choose not to announce a continuing review. If you have any questions, feel free to contact me at irb@mnsu.edu or 507-389-5102.

The Principal Investigator (PI) is responsible for maintaining signed consent forms if used in a secure location at MSU for 3 years. If the PI leaves MSU before the end of the 3-year timeline, he/she is responsible for following "Consent Form Maintenance" procedures posted online.

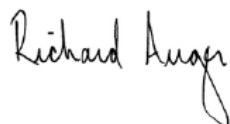
Cordially,

A handwritten signature in black ink, appearing to read "Mary Hadley".

Mary Hadley, Ph.D.
IRB Coordinator

A handwritten signature in black ink, appearing to read "Sarah Sifers".

Sarah Sifers, Ph.D.
IRB Co-Chair

A handwritten signature in black ink that reads "Richard Auger". The signature is written in a cursive style with a large, looping 'R' and a distinct 'A'.

Richard Auger, Ph.D.
IRB Co-Chair

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Minnesota State University, Mankato IRB's records.

Appendix D

Please complete this survey about your PLCs. Responses will be used to develop the principals' networking session that will be held in Marshall on January 21. Thank you for your time.

Demographics

1. Are you a

☐ Male

☐ Female

2. How long have you been a principal?

☐ 1-3 years

☐ 4-6 years

☐ 7-9 years

☐ 10-12 years

☐ More than 12 years

3. How many years have you been a principal in a district that is part of the Flexible Learning Year Initiative?

☐ 1 year

☐ 2 years

☐ 3 years

PLC structure

4. On average, how many teachers are in each of your school's PLCs?

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ 7

☐ More than 7

5. Do you have any teachers that participate in out-of-district PLCs?

- ☐ Yes
☐ No

6. Have Norms been established in each PLC?

- ☐ Yes
☐ No

7. Are Norms implemented in PLCs?

- ☐ Yes
☐ No
☐ Our PLCs don't have Norms

8. Are SMART goals developed and documented in each PLC?

- ☐ Yes
☐ No

9. Are SMART goals referred to on an on-going basis in PLCs?

- ☐ Yes
☐ No
☐ PLCs don't have SMART goals

10. Does your school have a PLC leadership team?

- ☐ Yes
☐ No

If yes, how many people are part of your PLC Leadership Team?

11. How frequent does your PLC leadership team meet?

- ☐ More than 1 time per week
☐ 1 time per week
☐ 1 time per month
☐ 1 time every 2-4 months
☐ 1 time every 6 months
☐ We have a PLC leadership team, but we don't meet
☐ We don't have a PLC leadership team.

12. Who is on your PLC leadership team? (check all that apply)

- ☐ Teachers
- ☐ Principals
- ☐ Superintendents
- ☐ Directors
- ☐ Coordinators
- ☐ Support staff
- ☐ Other
- ☐ We don't have a PLC leadership team

13. What topics of professional development are offered in your school to teachers about the elements of PLCs? (Check all that apply)

- ☐ Curriculum Alignment
- ☐ Developing Essential Learner Outcomes (Power Standards)
- ☐ Common Assessments
- ☐ Interventions
- ☐ Enrichments
- ☐ None

Other (please specify)

14. Who provides professional development on PLC practices? (Check all that apply)

- ☐ In-district teachers who don't serve on your PLC Leadership Team
- ☐ In-district teachers who serve on your PLC Leadership Team
- ☐ In-district coordinators and/or administrators
- ☐ Out of district experts
- ☐ We don't provide professional development on PLC practices.

Other (please specify)

Learning, Collaboration, and Results

***15. To what extent has your school**

	1 = Not at all	2 = Has begun by individual teachers	3 = Some teams of teachers/grade levels/departments have completed.	4 = All teams of teachers/grade levels/departments have completed.
Aligned curriculum to state or national standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identified essential learner outcomes (power standards)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Developed common (formative or summative assessments)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identified appropriate interventions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identified appropriate enrichments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. How often do your school's PLCs meet?

- ☐ One time per semester
- ☐ One time per month
- ☐ Two times per month
- ☐ One time per week
- ☐ More than one time per week

17. What topic(s) of PLC discussions have you observed? (Check all that apply)

- ☐ Curriculum Alignment
- ☐ Essential Learner Outcomes (Power Standards)
- ☐ Common Assessments
- ☐ Interventions
- ☐ Enrichments
- ☐ I have not observed any of these discussions

Other (please specify)

18. Please select which stage of the PLC Continuum you believe your school is in.

- ☐ Pre-Initiation Stage. The school has not yet begun to address the principle or practice of a PLC.
- ☐ Initiation Stage. The school has made an effort to address this principle or practice, but the effort has not yet begun to impact a critical mass of staff members.
- ☐ Implementation Stage. A critical mass of staff members is participating in implementing the principle or practice, but many approach the task with a sense of compliance rather than commitment. There is some uncertainty regarding what needs to be done and why it should be done.
- ☐ Developing Stage. Structures are being altered to support the changes, and resources are being devoted to moving them forward. Members are becoming more receptive of the principle, practice, or process because they have experienced some of its benefits. The focus has shifted from "Why are we doing this?" to "How can we do this more effectively?"
- ☐ Sustaining Stage. The principle or practice is deeply embedded in the culture of the school. It is a driving force in the daily work of staff. It is deeply internalized, and the staff would resist attempts to abandon the principle or practice.

19. Please rate the following. To what extent have you observed a shift in fundamental purpose in your school's PLCs? 1=No shift 4=Shifted completely

	1	2	3	4
From a focus on teaching TO a focus on learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From emphasis on what was taught TO a fixation on what students learned	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From coverage of content TO demonstration of proficiency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From providing individual teachers with curriculum documents such as state standards and curriculum guides TO engaging collaborative teams in building shared knowledge regarding essential curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. Please rate the following. To what extent have you observed a shift in use of assessments in your school's PLCs? 1=No shift. 4=Shifted completely

	1	2	3	4
From infrequent summative assessments TO frequent common formative assessments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From assessments to determine which students failed to learn by the deadline TO assessments to identify students who need additional time and support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From assessments used to reward and punish students TO assessments used to inform and motivate students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From assessing many things infrequently TO assessing a few things frequently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From individual teacher assessments TO assessments developed jointly by collaborative teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From each teacher determining the criteria to be used in assessing student work TO collaborative teams clarifying the criteria and ensuring consistency among team members when assessing student work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From an over-reliance on one kind of assessment to balanced assessments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From focusing on average scores TO monitoring each student's proficiency in every essential skill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. Please rate the following. To what extent have you observed a shift in the response when students don't learn in your school's PLCs? 1=No shift 4=Shifted completely

	1	2	3	4
From individual teachers determining the appropriate response TO a systematic response that ensures support for every student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From fixed time and support for learning TO time and support for learning as variables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From remediation TO intervention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From invitational support outside of the school day TO directed (that is, required) support occurring during the school day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From one opportunity to demonstrate learning TO multiple opportunities to demonstrate learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Please rate the following. To what extent have you observed a shift in the work of teachers in your school's PLCs? 1=No shift 4=Shifted completely

	1	2	3	4
From isolation TO a focus on learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From each teacher clarifying what students must learn TO collaborative teams building shared knowledge and understanding about essential learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From each teacher assigning priority to different learning standards TO collaborative teams establishing the priority of respective learning standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From each teacher determining the pacing of the curriculum TO collaborative teams of teachers agreeing on common pacing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From individual teachers attempting to discover ways to improve results TO collaborative teams of teachers helping each other improve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From privatization of practice TO open sharing of practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From decisions made on the basis of individual preferences TO decisions made collectively by building shared knowledge of best practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From "collaboration lite" on matters unrelated to student achievement TO collaboration explicitly focused on issues and questions that most impact student achievement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From an assumption that these are "my kids, those are your kids" TO an assumption that these are "our kids"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Please rate the following. To what extent have you observed a shift in focus in your school's PLCs? 1=No shift 4=Shifted completely

	1	2	3	4
From an external focus on issues outside of the school TO an internal focus on steps the staff can take to improve the school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a focus on inputs TO a focus on results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From goals related to completion of project and activities to SMART goals demanding evidence of student learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From teachers gathering data from their individually constructed tests in order to assign grades TO collaborative teams acquiring information from common assessments in order to (1) inform their individual and collective practice and (2) respond to students who need additional time and support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Please rate the following. To what extent have you observed a shift in school culture in your school's PLCs? 1=No shift 4=Shifted completely

	1	2	3	4
From independence TO interdependence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From a language of complaint TO a language of commitment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From long-term strategic planning TO planning for short-term wins	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From infrequent generic recognition TO frequent specific recognition and a culture of celebration that creates many winners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Please rate the following. To what extent have you observed a shift in professional development in your school's PLCs? 1=No shift 4=Shifted completely

	1	2	3	4
From external training (workshops and courses) TO job-embedded learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From the expectation that learning occurs infrequently (on the few days devoted to professional development) TO an expectation that learning is ongoing and occurs as part of routine work practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From presentations to entire faculties TO team-based action research	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From learning by listening TO learning by doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From learning individually through course and workshops TO learning collectively by working together	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From assessing impact on the basis of teacher satisfaction ("did you like it?") TO assessing impact on the basis of evidence of improved student learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From short-term exposure to multiple concepts and practices TO sustained commitment to limited focused initiatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you for completing the PLC survey for Administrators!

Appendix E

1. What supports have moved teachers from an individual focus on teaching to collective focus on learning?
2. Has data played a role in your PLCs? If so, how?
3. Has collaboration changed from the beginning of PLCs to now? If so how?
4. What are the barriers in place that impede your staff from implementing PLC?
5. How does your school address these barriers?
6. What professional development offerings have changed in your school since the inception of PLCs?
7. What has been the impact of PLCs on student achievement in your district?
8. What differences have you observed in type of assessments administered since starting PLCs?
9. What role has time and structure played in PLCs?
10. Does your school collectively celebrate successes? If so, how?
11. What other comments, questions, or concerns do you have about successes and barriers in establishing PLCs?

Appendix F

High School Principal Focus Group Interview

I: The first question is what supports have moved teachers in your district from an individual focus on teaching to a collective focus on learning? And thinking about it from where you when you started until now. What supports have moved teachers from an individual focus on teaching to a collective focus on learning?

P: Admin directive.

P: Meeting with fellow teachers.

P: A modeling of even administration. Umm... Collectively meeting with other administrators as well as with teachers and that modeling has helped facilitate (inaudible) for teachers.

P: Formation of PLCs have basically ah, set our district by setting aside time for ah collaboration among staff. We didn't have that before in a HS setting and now it's been setup and put in place and everyone seems to enjoy the opportunities to work together with fellow teachers in cohorts.

P: Common time within the school day. Cuz most of our teachers, especially at the secondary level don't have common prep time. So it makes a big difference to the buy-in when you can have some collaboration time.

I: What role has data played in your PLCs?

P: I think in ours, we are in a stage where everybody's in different spots.

P: We're just starting with data to get to that point now .

I: The areas that you're talking about when you are just starting to use data, is that the MCA are?

P: No, we're talking about like common assessments. We went from a schedule where we had a lot of single-- singleton grades. We moved to a schedule where there are at least two people doing the same thing. And so this year there has been a lot of work on common assessments.

I: You talked about this and mentioned a little about this already but, has collaboration changed from the beginning of your PLCs until now? I heard some say yes, so if so, how?

P: I think it has improved the focus of their, of what they are talking about. We used to be more day to day troubleshooting talking about kids and the behaviors and stuff and now it's become more useful to them as far as looking at a little bit of data

- P: I think it's more of a shared discussion. It's not so much my kids and the kids in my classroom, but they're our kids and our curriculum and how we do we move them forward.
- P: Not only that, but I think it's the alignment of curriculum K-12 both vertically and horizontally I think has really opened up among the staff. It also has given staff a little more time to identify the strengths and weaknesses that their dealing with as far as the curriculum and the strands that are built into the state of MN and I think that is where the MCA Grad testing – as they dig deeper into that, they've also identified where they need to improve curriculum and whether it's the high school setting or middle school setting program.
- P: I would kind of echo that too, I think (cough) with our staff, there has been a lot of refining and of when you look at the standards that are set from the state and basically what we are trying to do trying to reduce that down to a certain standpoint and focus more on what is essential from those and then be able to make sure all of the strands are woven into the curriculum. But I think that going from a broad scale, it is a daunting task to look at everything, so trying to refine it down to a manageable set of standards for the teachers to be able to teach.
- I: What barriers have you seen to getting PLCs up and going?
- P: It's the same barriers I saw 10 years ago when I started, there are some staff members who don't want to talk to each other. They want to go to their classroom, they want to sit there, they don't want to deal with the problem because they don't understand that how they affect themselves in the classroom is how they affect the institution in itself. They could help if they would come to the table thinking they could help. A lot of people don't understand that.
- P: I have no staff members at the HS that give common assessments because they don't teach a common course, so we are trying to figure out a way to do that and I thought this morning's speaker did a better job of allowing us to learn the assessments, not so much on formal assessments within the classroom, but just how to get kids to think and everybody can do that. How to get kids to want to learn.
- P: A barrier is not allowing a choice and when _____ first went into the PLC process, um, we gave teachers the option or the opportunity to have input where they would like their PLC focus and we've narrowed that down and people have had a choice on which PLC and we switched then we went or we surveyed everybody and some wanted to be by grade level or subject matter and so that's where we are now. When you have people in different buildings, that are like counselors or nurses and now the counselors and nurses are together.
- P: I think another problem is many staff want a roadmap, and the roadmap hasn't been laid and are unwilling to explore new ground with the risk that is involved with change.
- P: There is a reason we know Lewis and Clark [laugh] where no one else will go.
- I: How do you address something like that, okay there isn't a roadmap, we are all in this together, but that's hard for people to do, but you still need to bring them along, so how do you do that?

P: Okay, I have said this before and I think it is important that sometimes you need to leave people alone and at some point they will either join on the wagon or they get left behind and those people that want to be successful and want a to present a program of quality are going to step up to the plate and continue to grow and expand either in the curricular areas or when you talk power standards or any of the other parts of forming and being a successful curriculum team. I think it is critical that we don't stop doing what are doing, just because there are a few people who don't want to do it. We need to move on and leave those people behind.

P: There is a part too with that, that they see what they are measuring against is what they perceive us as administrators saying that this is wrong how you're doing it. And so, there is a fear factor of what our perceptions of what they are doing in their PLC groups are, so what I've tried to go visit the groups, be right there with them. Even when they ask questions of me, I may not always have all the answers, but re-train and tell them it isn't a black and white situation. And it isn't - I love the titles of the books we've read, "Learning by doing" and you know what, we are going to keep doing and that is the biggest thing. We can't stop doing. We have to keep doing this, and were not going to get this right the first time. Like the speaker said, you have to learn how to fail better. I think that is the biggest thing is realizing it's okay, you're not failing, and we have to keep doing. Because if we don't keep doing, then that is failing.

P: Being too prescriptive. The PLC groups can do.

I: Have any of your administrations thought about the loose/tight relationship? Have you been thoughtful about what you will be loose and tight on? What were some of the pieces you decided you would be loose and tight on?

P: We set minimum expectations that everyone has to meet. They have to meet 45 minutes 1 time per week. They have to have common assessments built.

I: You gave them a timeline of when they have to have them complete?

P: Correct, they quarterly reports they have to do. We built those into the expectations. They need to have agendas and I think people understand now. At first it was taking valuable time for the paperwork for it, but we tried not to make it cumbersome. It's more of a thing that we are tight on that.

I: Other things loose or tight?

P: We made it tight that just like the agenda, we as administrators want to see the notes from their meetings about what is accomplished.

P: We basically we are tight that they all have to have a smart goal. If we saw a goal that was way off base, we let them know.

I: what professional development offerings have changed in your district since we started PLCs?

P: What we've got right now is of course is this, but we realized where to stop at when we have some of those days. It has been strictly designated at PLC time. It's the one thing no one has enough of. Where in the past as the district we've said, we have this stay and it would be loose. Now we are at a point where everyone feels comfortable that we are doing PLC work.

I: Does anybody else use the half or full day for PLC time?

P: Yes, yes, yes.

P: See and, with that said, I'll talk about my March 21st in-service day for ½ day. Right now my goal is to bring in someone from the state of MN to talk about how the common core standards are connected to the power standards or essential learner outcomes and how to lay all that in. At this point in time, so we can continue to move forward with PLCs, to do the common assessments and the summative assessments so we can wrap all of that in with the couple of years, we've got to have those things laid into our ah curriculum and put in to the strands and standards we are dealing with. I think we've got to continue to move forward and give staff opportunities to learn and utilize things like that in the PLC groups. And you know, these half day in-services that are coming that we all have to deal with, I think it's a good idea to give them the information they need to move to the next common level.

I: What differences have you observed in type of assessments administered since starting PLCs?

P: We are seeing teams doing assessments that are incorporating higher level thinking.

P: Our science department they are right now with the common assessments, they've got to the point now where they have to start collecting data. That's big because they will look at whether their assessments are true or not.

I: So are their assessments looking different now?

P: Yes they are, and it's more of a common approach. If there are two teachers teaching the same course, they are utilizing the same questions on the assessment they give. Which is good.

P: I've seen some change in thought process in some of the data or grade given to students. Not on an average of test scores, but on an assessment that the teacher knew the student was an A student. The student got a D on a test. The teacher talked to the student for the various reasons why that was. The student was given the opportunity to do the test over. Instead of giving the student a B in the class, they gave the student an A in the class. And the reason they chose to do that was that they had completed it, what the individual instructor wanted to have completed regarding thought process. And I've seen a little bit of change in that.

P: I would say that I've seen change to maybe more of the formative assessments. More shorter bits of analysis on more of a day to day and week to week basis, as opposed to just simply at the end giving the raw test and seeing where they're at. More of an emphasis – there is a

theory that so hopefully on a daily basis you are doing some formative assessments and so that's one of the things we've really picked up on.

P: It's like we are speaking the same language with formative assessments. Teachers are talking about how and I assessing the kids and how am I using that.

P: Learning is more important than grades.

P: It's like their speaking the same language.

P: I think though that there is an overarching thing as well that that drive to the MCAs or the summative assessment. I think what he talked about today is what people should carry on is that passion for learning and if we can transmit that and I wonder if some of that gets lost in this mix because some of the things they used to do today as teachers had passion for have switched out of to focus and concentrate, maybe incorrectly, but to get these tests passed. And with that I have a concern that we probably don't pay as much attention on it as we should, aren't as tight on that as the elementary can see that focus. Particularly on the summative assessments and I have a concern that we are turning out children who can do these tests, but where is the creativity? Where is the passion? Where is that desire to go out on their own to be and do their own? That is a concern I have.

P: I agree with that concern. Years ago when the State of MN had the profile of learning, kids had to get out of something. They had to be creative on what they were accomplishing. We had to help with that process.

I: A couple of people have alluded to this earlier. What role has time and structure played in PLCs?

P: As far as what? Time and structure of the school day? Time and structure of the school year? As far as what?

I: School day with embedding PLC time.

P: I'll say something and this has been alluded to before, that there has to be common time for staff to meet during the day itself. The way I did that with a four period day was by adding time to the school day and have a late start one day per week. We have PLCs on Wednesday mornings.

I: Does your school collectively celebrate successes, like DuFour talks about.

P: The staff does occasionally on Fridays. [Laugh]

P: We've tried to recognize student athletes and put in the school building a focus on academic success and focus on students improving through NWEA scores, the top ten in each grade. We honor the seniors.

- I: Do you have any other comments, questions, thoughts about starting PLCs in your schools and any other successes or barriers you would like to comment on?
- P: One of the big things for us is that it has got us to align curriculum in grades 6-12 so people weren't repeating things.
- A: For _____ school, the next level is curriculum-wise, we have things set. We have essential outcomes narrowed down, but now so now what. Even with formative assessment, so we give a formative assessment and half of this group got it and half of the group didn't get it, now what do we do next? So, that is kind of in the theory stages, so how do you manage a classroom where you are still trying to challenge high flyers while you are still trying to bring the students along who don't get it. What does it look like? How is it manageable for teachers? Because I think that can be a big juggling act right there. For some teachers, that is where they get stuck, where they get hung up, and they won't want to keep the doing.
- P: They need to have a professional learning community that looks at data that also looks at this kind of stuff, but you also need to have a professional learning community that looks at instruction. This can improve instruction. This can improve test scores even more. They should be able to make adjustments without so much pressure placed on them, they should be able to make those adjustments should be made every time in how we teach. If you have both of them, I believe you will have a significant learning community in your school. If you have one, I don't think you can have it and the teacher has to be responsible.
- P: I will build off of that in that we are struggling with the now what component. With a classroom assessment when all students get it with the exception of three students, how do you reach those students? Ignorance is bliss [Laugh].
- P: Another thing that comes to my mind is the focus has been on academics and in that regard the questions can be used for broader scope such as mental health and more. There is reference to that in the literature but the same process can be useful to in a broader scope.

Appendix G
Middle School Principal Focus Group Interview

- I: You should have received a survey monkey on PLCs. I'm working on my dissertation and the topic is identifying successes and barriers in establishing PLCs from principals perspectives. I will leave the survey results with you today. I have 10 questions I would like to ask with follow-up questions.
- I: What supports have moved teachers in your school from an individual focus on teaching to a collective focus on learning?
- P: I think the FLY has, for my district, at the beginning it was like pulling teeth but now they hear the other districts communicating that they can do it, so my teachers feel like they can do it also.
- P: I agree with that. You hear other teachers talking about it.
- P: I think its helped in our PLC time back in our schools when they start cross-references what the social studies teachers do compared to what the science do and oh, that is what we did in the math group.
- I: What role has data played in your PLCs?
- P: I would say in _____ that's been an area that we have been weak in and in listening to the presenter today, I feel like we are more of the teacher learning model instead of the professional learning model. Teachers are sharing their professional practice versus a focus on student learning. Our teacher leaders and administrators aren't really looking at it with a student focus. That's been an area that has been difficult and people have been reluctant to bring data.
- P: I want to piggy-back on that and the data itself is fine, the speaker said this is where we are at and this is where we want to go, but the data doesn't tell us that. We need better practices to figure out the road map to figure out where we want to go, so data sometimes, I think has been the buzz word for the last 5 years and data alone does not get you where you need to be.
- P: In _____ we look at data and it helps us drive our PLCs and what interventions we want put in place for students. We have created formative assessments to work on those but, right now, we ka-boshed the NWEA assessments, um this year, but are bringing them back as a way of assessing students. When we get back, we'll start PLCs this week and will we're going to dive into the data again. We know we have some weaknesses in our curriculum that we need to work on and the teachers are working on what we need to do for those interventions and we do use data.
- I: Did you say you took out NWEA and now are bringing it back?

- P: Yes and the reason is that with the new teacher and principal evaluations, we need some more data to better show what is going on in the classroom. We have a snapshot of the MCAs right now, the superintendent and I get together to look at the data, but not sure it is a fair snapshot. We don't have enough data points.
- P: We have been in the same dilemma. Our high school had stopped doing the NWEA and when we started having PLC discussions, our PLCs are 6-12 for the secondary, there was no common data to share. Now we are encouraging the high school to get back on and use NWEA so there is common data because the MCAs are so different at those levels.
- P: This last year with the exception of 8th grade, we didn't do our fall or winter, um NWEA. We did the spring NWEA. For the most part, people are pretty content with that at the middle school, however we are taking so much other data and when the reading teachers get together the amount of data they have at their disposal is [sigh] pretty significant, in my opinion. They have NWEA, STAR, weekly benchmarks, and all of your RTIs, and enrichments in those categories; they really do have a great deal of data within that area. Math might be more concerning with amount of data available. The 8th graders take NWEA to make decisions for high school placement.
- I: So shifting from data to collaboration, has collaboration changed in your school since PLCs have started, and if so, how?
- P: We've done PLCs for about 6 years and at first, I remember when we first started, we kind of made them based on peoples personalities and who we thought could work well and then we evolved and went into PLCs we let folks sign up based on topic of interest. That worked well and the past 2 years we have went to the departmental focus. I think all have their benefits and drawbacks. One of the benefits I see is to allow people to have a conversation with other teachers within their teaching domain. This has really helped with curriculum alignment. The downside is these are the same people we see all the time anyway, so the building has become more isolated. So from ah, ah, satisfaction of knowing who your colleagues are, that teach other areas has decreased.
- P: Do you see more productivity out of PLCs now that they are more departmentalized?
- P: Ah, yes and no – I mean I think before when they signed up for what they were interested in, they were highly motivated so you would see how someone would take a strategy that they learned about, and maybe learned it from a language arts person and be able to implement that into a math or social studies classroom. Now, the benefit is that the curriculum is more aligned. The assessment practices are more consistent within each department because they have dedicated time to talk, share, and learn from each other. And so, to answer your question I think it depends on what are we calling productivity. Some like it and some don't. That's been the case since we've started PLCs.
- P: In _____. We are a one section school and have no choice but to do it across subject fields. Teachers first reaction was, well this isn't the way _____ does it or this isn't the way _____ does it. We aren't going to look like others. We became more student

focused. For example, Johnny has four A's and we've seen a recent drop off. We've gotten better with those types of things, but not so much about what is the best practice in teaching certain topics.

I: Are your teachers able to talk data and bring up data with students being a one section school?

P: Yes, I'll bring in the grades or the progress reports for them. I try to make it teacher oriented and sometimes we look at Johnny specifically across courses. What's happening with Johnny?

P: What barriers are in place that impede your staff from implementing PLCs?

P: Like we just talked about, for smaller schools when there are only one section. It is hard if there is only one chemistry teacher. It is difficult to come up with common assessments.

P: Not everyone may not have the same curriculum.

P: I think the FLY for us has limited us. I think the reason for that is that the year before we had just got the board approval to get a 2 hour late start 1 time per month, but we got rejected by the state because of the minute requirement. It is disappointing because of the minutes we have to have in school and stuff we weren't able to do some of that stuff. Finding time in the day for teachers that do so much more than just teach, coach, sponsor events, etc. That's tough and ah, time.

P: Staff development. They have wonderful training for the ah district administrators and PLC trainers and that's great, sometimes the information is lost in translation. If we could have all of the teachers listen to all of the speakers we hear, that would be great. We should bring all teachers to hear the speakers.

P: When I find myself getting frustrated and I forget the teachers haven't heard everything that we've hear and I know our PLC trainers get frustrated too and I have to keep reminding that teachers haven't received all of the training we have. The trainings are awesome.

I: What professional development offerings have changed in your school since we've started FLY?

P: I think they are more focused in general. I think they used to be more random. Even if we aren't with the other 25 schools, we are doing something pertaining to what others are doing as well.

P: FLY staff development drives our professional development.

I: Does everyone have ½ day or full day in-services aside from FLY days?

P: Yes

P: Yes

P: Yes

I: What has been the impact of PLCs on student achievement in your district?

P: In our district it is too soon to tell. _____ can probably answer that better than anyone.

P: If we look at, I think it's helped and if we look at our data, we see an upward trend. I don't know if we can say it is exclusively because we've done professional learning communities. I think it's helped, but does the middle school do a good job of preparing students for high school, is the elementary doing a better job in preparing students for middle school? There are too many variables that I don't know how you would ever isolate to say truly this was the reason.

P: You pointed out variables and we are trying to convince our public right now and they keep wanting more data and they keep saying. And we keep saying there are so many variables.

P: If people want data, the economic data the presenter shared this morning and that was impressive and something I haven't thought of before. It would make it difficult for someone to argue that teachers having time to learn from each other isn't a good use of time or resources. Who wouldn't want their child's kindergarten teacher to learn from the best kindergarten teacher in their district or this part of the state?

I: What differences have you observed in type of assessments administered since starting PLCs?

P: Common and formative definitely at the middle school in _____ have increased.

P: Teachers are more comfortable using assessment, I think.

P: Teachers are more careful in how they prepare their assessments.

P: There doesn't seem to be the fear any more in assessing students. There has been the state fear that we have to prepare our students for the final test. Now we are talking about formative assessments and embedding those into our curriculum. I think teachers are more and more comfortable with creating the assessments and using the assessments to the benefit of the kids. I go in and listen to see what professional learning communities are doing.

P: I feel like there has been an increase in frustration ah towards the state you know the summative assessments as people have learned more about the value of formative and see the importance there and how that can impact the learning. Yet, every spring we created the lab schedule due to the no child left behind era and hopefully that is starting to come to an end.

P: I would echo that. I am frustrated that the experts are telling us to do it one way and the state is telling us to do it another way which may not be the best practice.

I: What role has time and structure played in your PLCs?

P: There is never enough time.

P: In small schools structure is difficult.

I: Did you have to, before PLCs did you have to alter your schedule to allow for PLC time, or did that time already exist?

P: Everyone had to alter the schedule.

I: Does your school collectively celebrate successes?

P: Not as much as we should.

P: Like as a district or a school?

I: Yes, in your school.

P: Yes, we have pep fests. We celebrate at graduation. We try to think positive.

P: I would say we do our celebrations through PBIS and they are academic in nature as well.

I: Are there other comments, questions, or thoughts you would like to share?

Appendix H Elementary Focus Group Interview

I: What supports in your building have moved teachers from an individual focus on teaching to a collective focus on learning?

P: I think this whole PLC process and the curriculum aspect has all helped them realize they can't just go in their classrooms and do whatever they want.

P: There is a lot more discussion because of the whole process.

P: Providing the time for them to collaborate has been really good.

I: Has data played a role in your PLCs and how?

P: It has brought into focus what the children are actually learning.

P: It's helped to align curriculum.

I: How has it helped to align curriculum?

P: Ahh, essentially we have looked at the standards and looked at the essentials and determined what needs to be dropped and what needs to be created. We compare it with test specs.

I: Has collaboration changed since you've started PLCs and if so, how?

P: Yes, focus on student outcomes.

P: Teachers don't feel isolated. They are talking to each other.

P: I think through collaboration teachers are seeing things that might work better than how they have done it in the past so they are adjusting their teaching together as a group because they are talking about it and because they are doing it together which is helping student performance.

I: What are the barriers in place that impede your staff from fully implementing PLCs?

P: Time

P: Time

P: Time

I: How is time a barrier?

P: One hour stints

P: Staff turnover or bringing in new staff.

P: I think a small percentage of staff is saying they don't believe in in the principle. They don't buy it.

I: How does your school address these barriers? Whether it's time, whether it's people who don't want to jump on the boat?

P: We've changed our schedule to early dismissal on Friday's.

P: There are plans for after school, so we've built time into the school day.

I: Do staff feel like Friday afternoon is a meaningful time?

P: I think they do, yes. They are professionals.

I: Are there other barriers?

P: We've linked new staff with people who are comfortable with the process. And we've also used the service coop as a resource.

P: Pair them up with a mentor, pair them up with a mentor. Sometimes veteran staff can even use a mentor.

P: It is difficult when people have to work together and they don't really want to work together. That makes their job less enjoyable.

I: What professional development offerings have changed since we've started PLCs? I know we come together and do these large groups together two times a year, but the other in-service time you have, has that changed?

P: For us it's been more singularly focus. The parts that go into PLCs, whether it is essential outcomes, standards based, data, etc.

P: Bringing in the co-op to help us focus on the parts of the process.

I: So there might be specific aspects of PLCs.

P: Yes.

P: Focus on learning targets. Focus on aspects of PLCs.

I: What is the impact of PLCs on student achievement in your district?

P: At this time, I don't know.

P: I don't know.

I: What differences have you observed in types of assessments administered since the start of PLCs?

P: I feel like our assessments have been more performance based. They are less based on a mastery checklist at the end of a chapter kind of thing. If we want kids to compare and contrast, they have to do a Venn diagram. They are probably writing more now than they were before. They can't just guess.

P: Grade levels and departments are assessing the same things.

P: When you are talking common assessments, do you mean more on the summative end or more on the formative end?

P: For us it is more formative in K-6.

I: What role has time and structure played in your PLCs? [Pause].

P: Prior to joining the FLY we didn't have PLCs, so there was no structure, there was more time. But are we there yet? No, it's still a process.

P: We've started meeting twice a month. By this time I was hoping staff would see the value in the time and asking for more time, but I haven't had that yet.

I: Does your school collectively celebrate successes and how?

P: As a school we celebrate by making AYP so we took half of the day and did fun things for the kids and the staff celebrated after school [Laugh].

P: Our staff has gotten together and shared the good things they've done in the classroom, the successful things.

A – We celebrate every week. The same things listed above. We celebrate the comments from parents. We celebrate the positive reinforcements.

Q – other comments, questions?